



# STIC Search Report

## EIC 1700

STIC Database Tracking Number: 104556

TO: Katherine Mitchell

Location: PK5 2A10

Art Unit : 3677

September 29, 2003

Case Serial Number: 10/176344

From: Barba Koroma

Location: EIC 1700

CP3/4-3D62

Phone: 305-3542

barba.koroma@uspto.gov

### Search Notes

Examiner Mitchell,

Please find attached results of the search you requested. The titles of hits are initially listed for quick perusal, followed by a detailed printout. The search involved searching structures along with the CAS numbers of various compounds in the composition, within the REGISTRY file. The hits were then crossed into CAPLUS and combined with each other and with utility text terms (i.e. cement or concrete composition). Please note that no hits were generated when the compounds in claim 1a were "anded." Please let me know if you have any questions.

Thanks.

Best Available Copy



=> file reg

FILE 'REGISTRY' ENTERED AT 12:18:08 ON 29 SEP 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 28 SEP 2003 HIGHEST RN 594810-89-6

DICTIONARY FILE UPDATES: 28 SEP 2003 HIGHEST RN 594810-89-6

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> file caplus

FILE 'CAPLUS' ENTERED AT 12:18:14 ON 29 SEP 2003

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FILE COVERS 1907 - 29 Sep 2003 VOL 139 ISS 14

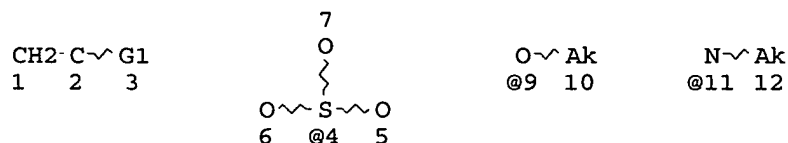
FILE LAST UPDATED: 28 Sep 2003 (20030928/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que

L1

STR

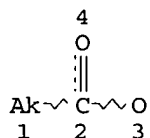


VAR G1=4/CB/9/11/AK  
NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE

L2 SCR 2043  
L3 QUE ABB=ON PLU=ON CEMENT(3A) COMPOS?  
L4 SEL PLU=ON L3 1- RN : 8970 TERMS  
L5 QUE ABB=ON PLU=ON 15214-89-8/CRN  
L6 QUE ABB=ON PLU=ON 110-16-7/CRN  
L7 QUE ABB=ON PLU=ON 2235-00-9/CRN  
L8 QUE ABB=ON PLU=ON 17832-28-9/CRN  
L9 ( 6656) SEA FILE=CAPLUS ABB=ON PLU=ON CONCRETE(4A) COMPOS?  
L10 SEL PLU=ON L9 1- RN : 6344 TERMS  
L11 ( 6339) SEA FILE=REGISTRY ABB=ON PLU=ON L10  
L12 ( 8949) SEA FILE=REGISTRY ABB=ON PLU=ON L4  
L13 ( 2302) SEA FILE=REGISTRY SUB=L12 SSS FUL L1 AND L2  
L14 ( 35612) SEA FILE=REGISTRY ABB=ON PLU=ON (L5 OR L6 OR L7 OR L8)  
L15 STR



NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE

L16 ( 12553) SEA FILE=REGISTRY ABB=ON PLU=ON L11 OR L12  
L17 ( 2409) SEA FILE=REGISTRY SUB=L16 SSS FUL L15 AND L2  
L18 STR

Ak~O~G1      Ak @4      N~Ak      Ak~OH      Cb~OH  
 1   2   3      @5   6      @7   8      @11 12

O=C~OH      O=C~Ak  
 13 @14 15      16 @17 18

VAR G1=4/5/7/11/14/17  
 NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE  
 L19 (      2270)SEA FILE=REGISTRY SUB=L16 SSS FUL L18 AND L2  
 L20      STR

Ak~N~C=O  
 1   2   3   4

NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE  
 L21 (      352)SEA FILE=REGISTRY SUB=L16 SSS FUL L20 AND L2  
 L22 (      178)SEA FILE=REGISTRY ABB=ON PLU=ON L13 AND L17 AND L19 AND L21  
 L23 (      528)SEA FILE=CAPLUS ABB=ON PLU=ON L22  
 L24 (      34881)SEA FILE=CAPLUS ABB=ON PLU=ON L14  
 L25 (      197)SEA FILE=CAPLUS ABB=ON PLU=ON L23 AND L24  
 L26 (      24)SEA FILE=CAPLUS ABB=ON PLU=ON L25 AND (CEMENT? OR CONCRETE)  
          AND COMPOS?  
 L27 (      30)SEA FILE=CAPLUS ABB=ON PLU=ON L25 AND (CEMENT? OR CONCRETE)  
 L28 (      1)SEA FILE=CAPLUS ABB=ON PLU=ON (L26 OR L27) AND (WELL? OR  
          DRILL? OR BORE?)  
 L29      30 SEA FILE=CAPLUS ABB=ON PLU=ON (L26 OR L27 OR L28)  
 L31      1 SEA FILE=REGISTRY ABB=ON PLU=ON 15214-89-8  
 L32      1 SEA FILE=REGISTRY ABB=ON PLU=ON 110-16-7  
 L33      1 SEA FILE=REGISTRY ABB=ON PLU=ON 2235-00-9  
 L34      1 SEA FILE=REGISTRY ABB=ON PLU=ON 17832-28-9  
 L35      0 SEA FILE=CAPLUS ABB=ON PLU=ON L31 AND L32 AND L33 AND L34  
          AND (CONCRETE OR CEMENT?) (5A) COMPOS?  
 L37      30 SEA FILE=CAPLUS ABB=ON PLU=ON L29 OR L35

=> d ti 1-30

L37 ANSWER 1 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

TI Redispersible polymer powders and their **cement** and mortar admixtures

L37 ANSWER 2 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

TI **Cement** dispersants containing (meth)acrylamide polymers having alkylene oxide chains

L37 ANSWER 3 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

TI Organic amine salt antifoamers for **cement compositions**

L37 ANSWER 4 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

TI Dental paste-type glass ionomer **cement compositions**

L37 ANSWER 5 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

TI Polymer-containing **cement** paste **compositions**

L37 ANSWER 6 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

TI Polymer additives for **cement** to improve strength

L37 ANSWER 7 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

TI Additives for hydraulic **compositions**, preparation of the additives, and **cement compositions** containing the additives

L37 ANSWER 8 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

TI The use of copolymers containing ethylenically unsaturated monocarboxylic acids, their hydroxyalkyl esters, and other monomers, as additives in mineral building material **compositions**, and the building materials obtained

L37 ANSWER 9 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

TI Admixtures for **concrete** and their use, and method for dispersing **cement** with, and **concrete** containing, the admixtures

L37 ANSWER 10 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

TI Functionalized polymer for use in dental adhesives

L37 ANSWER 11 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

TI Dental **cement compositions**

L37 ANSWER 12 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

TI Process for, and use of, aqueous polymer dispersions for preserving mineral products, manufacture of the aqueous coating materials dispersions, and the aqueous polymer dispersions obtained

L37 ANSWER 13 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

TI Grout materials for mechanical cable coatings

- L37 ANSWER 14 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Compositions** of precast **cement** mixtures for construction
- L37 ANSWER 15 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Setting retardant for **cement**-containing mixes
- L37 ANSWER 16 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Soil injection agents and injection process
- L37 ANSWER 17 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Aqueous polymer dispersions and their use with hydraulic binders
- L37 ANSWER 18 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Polymers and polymer dispersions and their use in hydraulic binders
- L37 ANSWER 19 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Artificial stone **compositions** for high-gloss products resistant to chemicals, water, and weathering
- L37 ANSWER 20 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Cement** admixtures for improving workability
- L37 ANSWER 21 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Cement** admixtures for improving flowability
- L37 ANSWER 22 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Cement** dispersants for slump loss prevention
- L37 ANSWER 23 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Polymeric admixtures for **cement**
- L37 ANSWER 24 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Cement** additives, their manufacture, and **cement compositions**
- L37 ANSWER 25 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Coating mineral substrates with fluoropolyurethanes
- L37 ANSWER 26 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Aqueous dispersions of synthetic resins, their manufacture, and their use as additives in mineral building materials
- L37 ANSWER 27 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Surface-treatment agents for mortar and **concrete** articles
- L37 ANSWER 28 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Lightweight **cement composites** with crack resistance and high water absorption
- L37 ANSWER 29 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

TI Synthesis of water-soluble copolymers and building materials containing them

L37 ANSWER 30 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

TI Composition and process for stimulating well production

=> d ibib abs hitstr ind total 137

L37 ANSWER 1 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:17336 CAPLUS

DOCUMENT NUMBER: 138:74318

TITLE: Redispersible polymer powders and their cement and mortar admixtures

INVENTOR(S): Hara, Koji; Kitamura, Kiyoharu; Shibuya, Mitsuo

PATENT ASSIGNEE(S): Nippon Synthetic Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 2003002978	A2	20030108	JP 2001-192521	20010626
PRIORITY APPLN. INFO.:			JP 2001-192521	20010626
<p>AB The polymer powders comprise polymer particles prepd. from ethylenically unsatd. monomers and/or diene monomers covered with anionic group-contg. vinyl alc. polymers satisfying <math>(-0.025 \text{ times. SV} + 2.40) &lt; I_a</math> (SV = sapon. degree; <math>I_a</math> = absorbance at 490 nm when mixed with I soln.). Thus, polymn. of Me methacrylate and Bu acrylate in the presence of sapond. allylsulfonic acid-vinyl acetate copolymer sodium salt (SV 83.0 mol%, <math>I_a</math> 0.330) gave a copolymer emulsion, which was spray-dried to give powders with good blocking resistance, film-formability, and water resistance. A compn. contg. cement and the powders was cured to give a test piece showing bending strength (JIS A 6203) 69 kg/cm<sup>2</sup>, compressive strength 300 kg/cm<sup>2</sup>, and good impact resistance.</p>				
<p>IT 81313-01-1DP, 2-Acrylamido-2-methylpropanesulfonic acid-vinyl acetate copolymer sodium salt, sapond.</p>				
<p>RL: IMF (Industrial manufacture); NUU (Other use, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (emulsifier, adsorbed on polymer particles; redispersible polymer powders for cement and mortar admixts.)</p>				
<p>RN 81313-01-1 CAPLUS</p>				
<p>CN Acetic acid ethenyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid, sodium salt (9CI) (CA INDEX NAME)</p>				

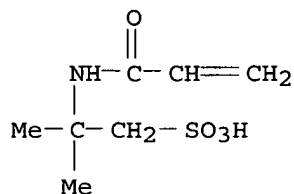
CM 1

CRN 64112-05-6

CMF (C7 H13 N O4 S . C4 H6 O2)x  
CCI PMS

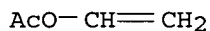
CM 2

CRN 15214-89-8  
CMF C7 H13 N O4 S



CM 3

CRN 108-05-4  
CMF C4 H6 O2



- IC ICM C08J003-12
- ICS C04B024-26; C08L023-00; C08L047-00
- CC 38-3 (Plastics Fabrication and Uses)
- Section cross-reference(s): 58
- ST redispersible polymer emulsion powder **cement** mortar admixture;  
methyl methacrylate butyl acrylate emulsion blocking resistance; allyl  
sulfonic vinyl acetate sapon **cement**
- IT **Cement**  
Mortar  
(admixts.; redispersible polymer powders for **cement** and  
mortar admixts.)
- IT Emulsifying agents  
Polymerization inhibitors  
Water-resistant materials  
(redispersible polymer powders for **cement** and mortar  
admixts.)
- IT **81313-01-1DP**, 2-Acrylamido-2-methylpropanesulfonic acid-vinyl  
acetate copolymer sodium salt, sapond. 120127-55-1DP, Allylsulfonic  
acid-vinyl acetate copolymer sodium salt, sapond.  
RL: IMF (Industrial manufacture); NUU (Other use, unclassified); TEM  
(Technical or engineered material use); PREP (Preparation); USES (Uses)  
(emulsifier, adsorbed on polymer particles; redispersible polymer  
powders for **cement** and mortar admixts.)
- IT 1762-95-4, Ammonium thiocyanate  
RL: CAT (Catalyst use); USES (Uses)



(polymn. inhibitor; redispersible polymer powders for cement and mortar admixts.)

IT 9003-55-8P, Butadiene-styrene copolymer 25852-37-3P, Butyl acrylate-methyl methacrylate copolymer  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (redispersible polymer powders for cement and mortar admixts.)

L37 ANSWER 2 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:56794 CAPLUS

DOCUMENT NUMBER: 134:119698

TITLE: Cement dispersants containing (meth)acrylamide polymers having alkylene oxide chains  
 INVENTOR(S): Takeda, Takeshi; Aoyama, Masahiro; Atsuji, Minoru  
 PATENT ASSIGNEE(S): Toa Gosei Chemical Industry Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001019512	A2	20010123	JP 1999-187373	19990701
PRIORITY APPLN. INFO.:			JP 1999-187373	19990701

AB Cement dispersants comprise copolymers from monomers including .alpha., .beta.-unsatd. carboxylic acids or their alkali salts and (meth)acrylamide having alkylene oxide side chains. The dispersants (e.g., acrylic acid-polyethylene glycol N-methylolacrylamide monoether copolymer) prevent slump loss of cement compns. and show good water-reducing ability.

IT 321546-66-1 321546-67-2 321546-68-3  
 321546-69-4

RL: MOA (Modifier or additive use); USES (Uses)  
 (cement dispersants contg. (meth)acrylamide polymers having alkylene oxide chains for slump loss prevention and water-reducing)

RN 321546-66-1 CAPLUS

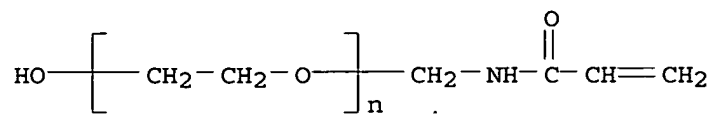
CN 2-Propenoic acid, polymer with .alpha.-[[[(1-oxo-2-propenyl)amino]methyl]-.omega.-hydroxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 321546-65-0

CMF (C2 H4 O)n C4 H7 N O2

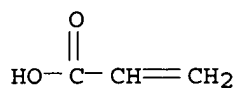
CCI PMS



CM 2

CRN 79-10-7

CMF C3 H4 O2



RN 321546-67-2 CAPLUS

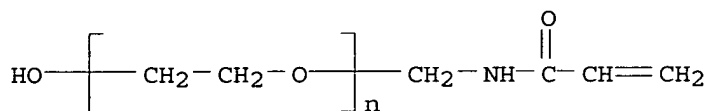
CN 2-Propenoic acid, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and .alpha.-[[[(1-oxo-2-propenyl)amino]methyl]-.omega.-hydroxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 321546-65-0

CMF (C2 H4 O)<sub>n</sub> C4 H7 N O2

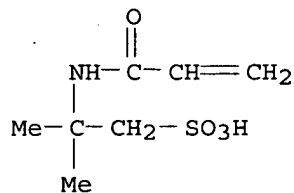
CCI PMS



CM 2

CRN 15214-89-8

CMF C7 H13 N O4 S

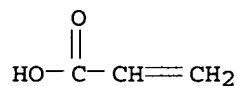


KOROMA EIC1700

CM 3

CRN 79-10-7

CMF C3 H4 O2



RN 321546-68-3 CAPLUS

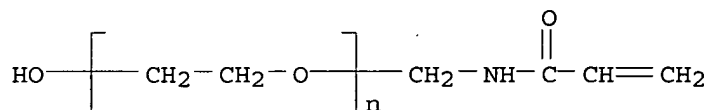
CN 2-Propenoic acid, polymer with oxirane and .alpha.-[[[(1-oxo-2-propenyl) amino]methyl]-.omega.-hydroxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 321546-65-0

CMF (C2 H4 O)<sub>n</sub> C4 H7 N O2

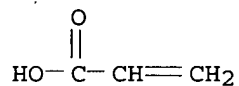
CCI PMS



CM 2

CRN 79-10-7

CMF C3 H4 O2



CM 3

CRN 75-21-8

CMF C2 H4 O



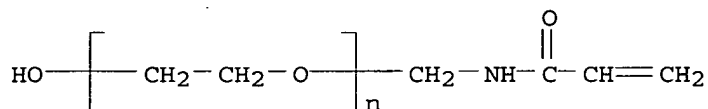
RN 321546-69-4 CAPLUS  
 CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer with oxirane and .alpha.-[[(1-oxo-2-propenyl)amino]methyl]-.omega.-hydroxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 321546-65-0

CMF (C2 H4 O)<sub>n</sub> C4 H7 N O2

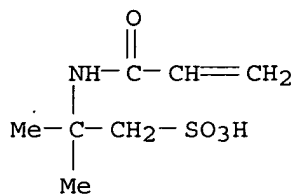
CCI PMS



CM 2

CRN 15214-89-8

CMF C7 H13 N O4 S



CM 3

CRN 75-21-8

CMF C2 H4 O



IC ICM C04B024-26  
 ICS C04B024-26; B01F017-22; C08F290-06; C04B103-40  
 CC 58-1 (Cement, Concrete, and Related Building Materials)  
 Section cross-reference(s): 38  
 ST polyethylene glycol methylolacrylamide polymer **cement**  
 dispersant; slump loss prevention **cement** acrylic  
 polyoxyalkylene; acrylate ethoxylated methacrylamide copolymer

KOROMA EIC1700

**cement** dispersant; water reducing dispersant acrylic polyoxyalkylene **cement**

IT Polyoxyalkylenes, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (acrylic, graft; **cement** dispersants contg. (meth)acrylamide polymers having alkylene oxide chains for slump loss prevention and water-reducing)

IT **Cement** (construction material)  
 Dispersing agents  
 (**cement** dispersants contg. (meth)acrylamide polymers having alkylene oxide chains for slump loss prevention and water-reducing)

IT **Cement** (construction material)  
 (portland; **cement** dispersants contg. (meth)acrylamide polymers having alkylene oxide chains for slump loss prevention and water-reducing)

IT **Concrete** modifiers  
 (water-reducing agents; **cement** dispersants contg. (meth)acrylamide polymers having alkylene oxide chains for slump loss prevention and water-reducing)

IT 321546-66-1 321546-67-2 321546-68-3  
 321546-69-4  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (**cement** dispersants contg. (meth)acrylamide polymers having alkylene oxide chains for slump loss prevention and water-reducing)

L37 ANSWER 3 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:631773 CAPLUS  
 DOCUMENT NUMBER: 133:226740  
 TITLE: Organic amine salt antifoamers for **cement compositions**  
 INVENTOR(S): Okada, Toshihiro; Noda, Yasushi  
 PATENT ASSIGNEE(S): Lion Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000247704	A2	20000912	JP 1999-55398	19990303
PRIORITY APPLN. INFO.:			JP 1999-55398	19990303
OTHER SOURCE(S): MARPAT 133:226740				

AB Salts of org. amines having C6-24 alkyl or alkenyl groups that may contain amide bonds and may be substituted with OH or halogens are claimed as antifoamers for **cement compns.** The agents may be salts of the above stated org. amines with acidic group-contg. polymers. The antifoamers may be used as a mixt. with aq. admixt. solns.

IT 291525-05-8  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (org. amine salts for **cement** defoamers)

RN 291525-05-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-methoxypoly(oxy-1,2-ethanediyl), graft, compd. with N,N-dimethyl-1-dodecanamine (9CI) (CA INDEX NAME)

CM 1

CRN 112-18-5

CMF C14 H31 N

Me<sub>2</sub>N-(CH<sub>2</sub>)<sub>11</sub>-Me

CM 2

CRN 291525-04-7

CMF (C<sub>7</sub> H<sub>13</sub> N O<sub>4</sub> S . C<sub>4</sub> H<sub>6</sub> O<sub>2</sub> . (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>5</sub> H<sub>8</sub> O<sub>2</sub>)<sub>x</sub>

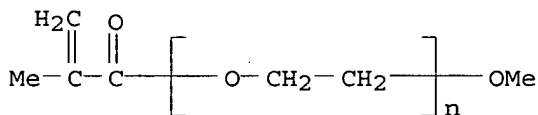
CCI PMS

CM 3

CRN 26915-72-0

CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>5</sub> H<sub>8</sub> O<sub>2</sub>

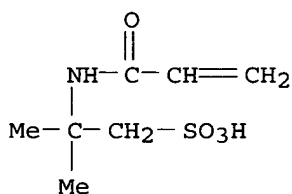
CCI PMS



CM 4

CRN 15214-89-8

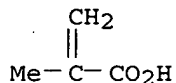
CMF C<sub>7</sub> H<sub>13</sub> N O<sub>4</sub> S



CM 5

KOROMA EIC1700

CRN 79-41-4  
CMF C4 H6 O2



IC ICM C04B024-12  
ICS C04B024-26; C04B103-50  
CC 58-1 (Cement, Concrete, and Related Building Materials)  
Section cross-reference(s): 46  
ST **cement** antifoamer alkylamine salt; alkenylamine salt  
**cement** defoamer  
IT Amines, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(coco alkyl dimethyl, salts, with methacrylic acid-methoxypolyethylene glycol methacrylate copolymer; org. amine salts for **cement** defoamers)  
IT Antifoaming agents  
**Cement** (construction material)  
(org. amine salts for **cement** defoamers)  
IT Amines, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(salts; org. amine salts for **cement** defoamers)  
IT 1920-05-4 2016-48-0 72846-42-5 111740-39-7D, salts with cocoalkyl di-Me amines 291524-98-6 291524-99-7 291525-00-3 291525-01-4 291525-03-6 291525-05-8  
RL: TEM (Technical or engineered material use); USES (Uses)  
(org. amine salts for **cement** defoamers)

L37 ANSWER 4 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1999:530862 CAPLUS  
DOCUMENT NUMBER: 131:189754  
TITLE: Dental paste-type glass ionomer **cement compositions**  
INVENTOR(S): Nakaseko, Hisashi  
PATENT ASSIGNEE(S): G-C Dental Industrial Corp., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11228327	A2	19990824	JP 1998-51264	19980218
US 6214101	B1	20010410	US 1999-244638	19990204
IT 1308184	B1	20011207	IT 1999-MI287	19990212

DE 19906834 A1 19990819 DE 1999-19906834 19990218

GB 2334527 A1 19990825 GB 1999-3750 19990218

PRIORITY APPLN. INFO.: JP 1998-51264 A 19980218

AB The **compns.** comprise 1st pastes contg. .alpha.,.beta.-unsatd. carboxylic acid polymers, H<sub>2</sub>O, and fillers inert to the polymers and 2nd pastes contg. fluoroaluminosilicate glass powders and acid group-free monomers. The 1st and/or 2nd pastes contain polymn. catalysts. The pastes give cured products of uniform property by simple mixing. First paste contg. acrylic acid-maleic acid copolymer 42, H<sub>2</sub>O 42, silane-treated siliceous sand powder 11, and Na benzenesulfinate 5 wt.% and 2nd paste contg. silane-treated fluoroaluminosilicate glass powder 73, hydroxyethyl methacrylate 15, 2-hydroxy-1-acryloyloxy-3-methacryloyloxypropane 4, di-2-methacryloyloxyethyl 2,2,4-triethylhexamethylenedicarbamate 4, and glycidyl methacrylate 4 wt.% were mixed to give a cured product showing bending strength 71 MPa and compressive strength 166 MPa. The processable time of the paste was 2 min 25 s.

IT 240122-52-5P 240122-53-6P 240122-55-8P  
240122-57-0P 240122-58-1P 240122-59-2P  
240122-62-7P

RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(dental paste-type glass ionomer **cement compns.**)

RN 240122-52-5 CAPLUS

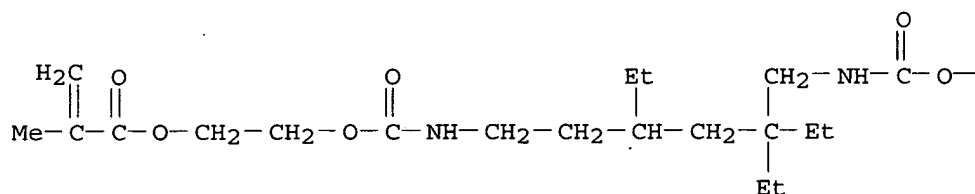
CN 11,14-Dioxa-2,9-diazaheptadec-16-enoic acid, 4,4,6-triethyl-16-methyl-10,15-dioxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, 2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

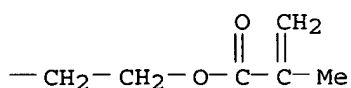
CRN 240122-51-4

CMF C26 H44 N2 O8

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PAGE 1-B

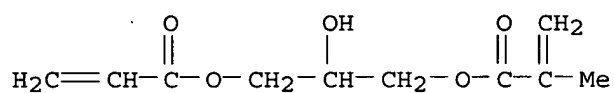




CM 2

CRN 1709-71-3

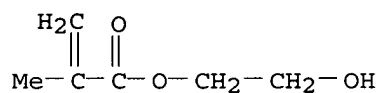
CMF C10 H14 O5



CM 3

CRN 868-77-9

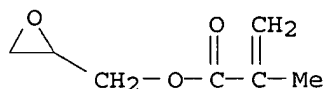
CMF C6 H10 O3



CM 4

CRN 106-91-2

CMF C7 H10 O3



RN 240122-53-6 CAPLUS

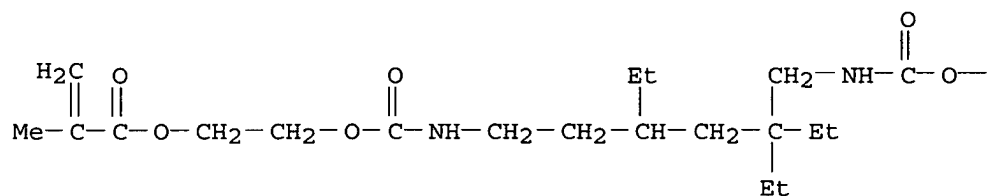
CN 11,14-Dioxa-2,9-diazaheptadec-16-enoic acid, 4,4,6-triethyl-16-methyl-10,15-dioxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2,2-dimethyl-1,3-propanediyl bis(2-methyl-2-propenoate) and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

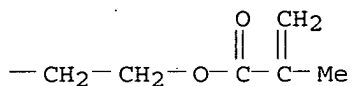
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CMF C26 H44 N2 O8,

PAGE 1-A



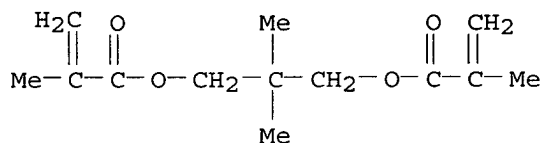
PAGE 1-B



CM 2

CRN 1985-51-9

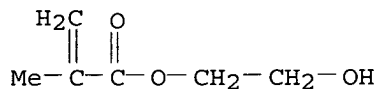
CMF C13 H20 O4



CM 3

CRN 868-77-9

CMF C6 H10 O3



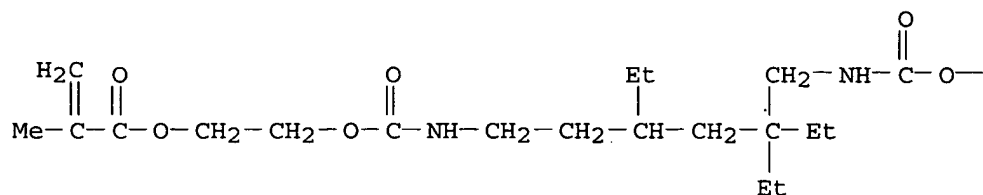
RN 240122-55-8 CAPLUS

CN 11,14-Dioxa-2,9-diazaheptadec-16-enoic acid, 4,4,6-triethyl-16-methyl-10,15-dioxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate and 2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

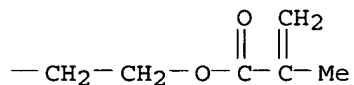
CM 1

CRN 240122-51-4  
CMF C26 H44 N2 O8

PAGE 1-A

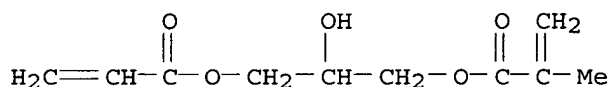


PAGE 1-B



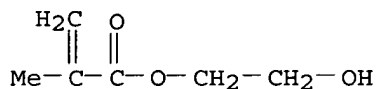
CM 2

CRN 1709-71-3  
CMF C10 H14 O5



CM 3

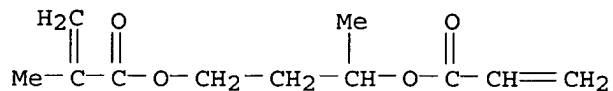
CRN 868-77-9  
CMF C6 H10 O3



RN 240122-57-0 CAPLUS  
CN 11,14-Dioxa-2,9-diazaheptadec-16-enoic acid, 4,4,6-triethyl-16-methyl-10,15-dioxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate and 3-[(1-oxo-2-propenyl)oxy]butyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

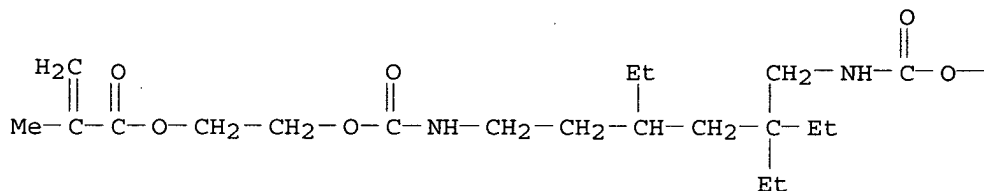
CRN 240122-56-9  
CMF C11 H16 O4



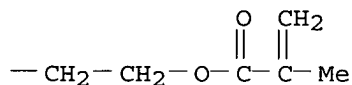
CM 2

CRN 240122-51-4  
CMF C26 H44 N2 O8

PAGE 1-A

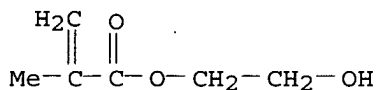


PAGE 1-B



CM 3

CRN 868-77-9  
CMF C6 H10 O3



RN 240122-58-1 CAPLUS  
CN 11,14-Dioxa-2,9-diazaheptadec-16-enoic acid, 4,4,6-triethyl-16-methyl-10,15-dioxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2,2-dimethyl-1,3-propanediyl bis(2-methyl-2-propenoate), 1,2-ethanediylbis(oxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

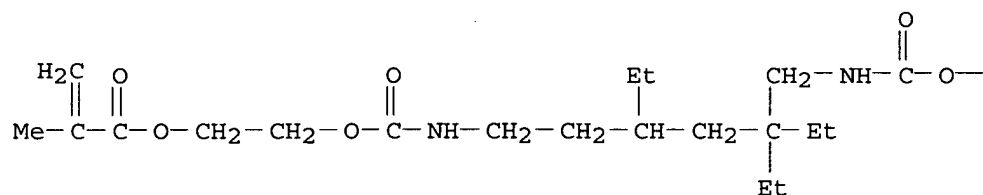
KOROMA EIC1700

CM 1

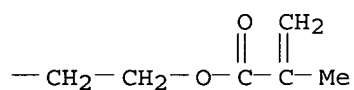
CRN 240122-51-4

CMF C26 H44 N2 O8

PAGE 1-A



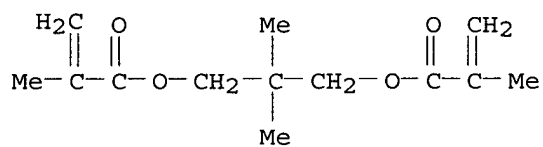
PAGE 1-B



CM 2

CRN 1985-51-9

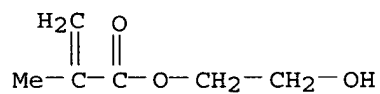
CMF C13 H20 O4



CM 3

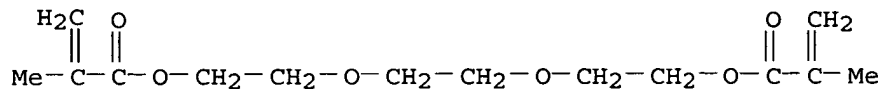
CRN 868-77-9

CMF C6 H10 O3



CM 4

CRN 109-16-0  
CMF C14 H22 O6

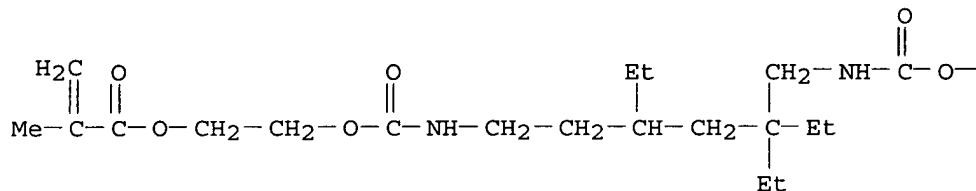


RN 240122-59-2 CAPLUS  
CN 11,14-Dioxo-2,9-diazaheptadec-16-enoic acid, 4,4,6-triethyl-16-methyl-10,15-dioxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, 2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propyl 2-methyl-2-propenoate and 1-methyl-1,3-propanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

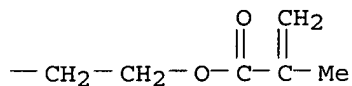
CM 1

CRN 240122-51-4  
CMF C26 H44 N2 O8

PAGE 1-A

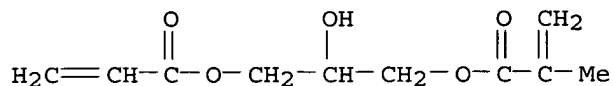


PAGE 1-B



CM 2

CRN 1709-71-3  
CMF C10 H14 O5

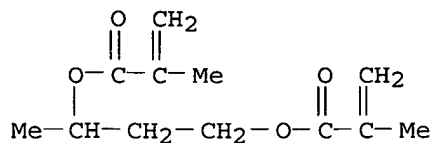


KOROMA EIC1700

CM 3

CRN 1189-08-8

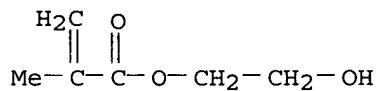
CMF C12 H18 O4



CM 4

CRN 868-77-9

CMF C6 H10 O3



RN 240122-62-7 CAPLUS

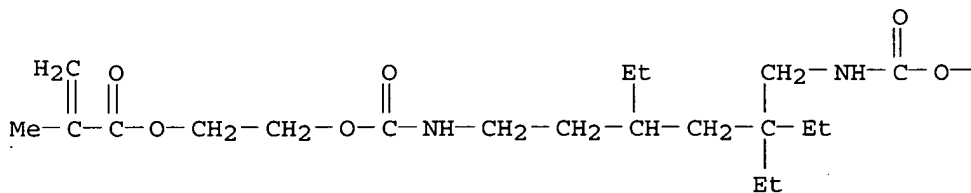
CN 11,14-Dioxo-2,9-diazaheptadec-16-enoic acid, 4,4,6-triethyl-16-methyl-10,15-dioxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 1,6-hexanediyl bis(2-methyl-2-propenoate) and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

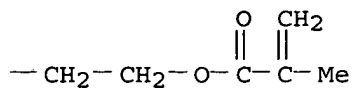
CRN 240122-51-4

CMF C26 H44 N2 O8

PAGE 1-A



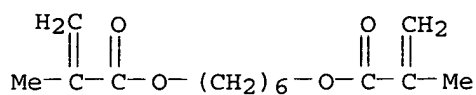
PAGE 1-B



CM 2

CRN 6606-59-3

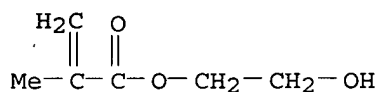
CMF C14 H22 O4



CM 3

CRN 868-77-9

CMF C6 H10 O3



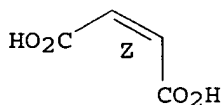
IT 26099-09-2, Poly(maleic acid) 29132-58-9, Acrylic  
acid-maleic acid copolymer  
RL: POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use);  
BIOL (Biological study); USES (Uses)  
(dental paste-type glass ionomer cement compns.)  
RN 26099-09-2 CAPLUS  
CN 2-Butenedioic acid (2Z)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



KOROMA EIC1700



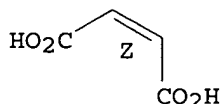
RN 29132-58-9 CAPLUS  
 CN 2-Butenedioic acid (2Z)-, polymer with 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 110-16-7

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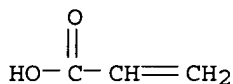
Double bond geometry as shown.



CM 2

CRN 79-10-7

CMF C3 H4 O2



IC ICM A61K006-06  
 ICS A61K006-08  
 CC 63-7 (Pharmaceuticals)  
 ST dental paste fluoroaluminosilicate glass ionomer **cement**  
 IT Dental materials and appliances  
     (**cements**; dental paste-type glass ionomer **cement**  
       **compns.**)  
 IT Ionomers  
     RL: POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use);  
     BIOL (Biological study); USES (Uses)  
     (dental paste-type glass ionomer **cement compns.**)  
 IT Aluminosilicate glasses  
     Aluminosilicate glasses  
     Fluoride glasses  
     Fluoride glasses  
     RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);  
     BIOL (Biological study); PREP (Preparation); USES (Uses)  
     (fluoroaluminosilicate; dental paste-type glass ionomer **cement**  
       **compns.**)  
 IT 240122-52-5P 240122-53-6P 240122-54-7P  
     240122-55-8P 240122-57-0P 240122-58-1P  
     240122-59-2P 240122-60-5P 240122-61-6P 240122-62-7P  
     RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic

preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(dental paste-type glass ionomer **cement compns.**)

IT 9003-01-4, Poly(acrylic acid) 25948-33-8, Acrylic acid-itaconic acid copolymer 26099-09-2, Poly(maleic acid) 29132-58-9, Acrylic acid-maleic acid copolymer

RL: POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(dental paste-type glass ionomer **cement compns.**)

L37 ANSWER 5 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:420816 CAPLUS

DOCUMENT NUMBER: 131:91492

TITLE: Polymer-containing **cement paste compositions**

INVENTOR(S): Ito, Atsushi; Morita, Hiroshi; Maeda, Kenichiro; Kitta, Kazuomi; Sakurai, Hideaki; Sakiguchi, Makoto

PATENT ASSIGNEE(S): Lion Corp., Japan; Onoda K. K.

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11180751	A2	19990706	JP 1997-349806	19971218
PRIORITY APPLN. INFO.:			JP 1997-349806	19971218

AB The **cement paste compns.** contain slag-type inorg. powder having av. particle size 0.1-10 .mu.m and a polymer emulsion having av. particle size 30-200 nm, which is prepd. by emulsion polymg. monomer mixts. contg. (1) unsatd. monomer selected from unsatd. monomer having carboxylic group and/or sulfo group and unsatd. monomer from carboxylic acid salt and/or sulfonate and (2) (meth)acrylic acid ester. The polymer emulsion improves the fluidity, prevents cracking, and enhances strength.

IT 153344-70-8 229317-71-9 229317-72-0

RL: TEM (Technical or engineered material use); USES (Uses)

(high-fluidity **cement paste compns.** contg. slag powder and)

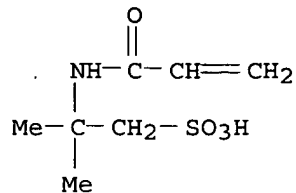
RN 153344-70-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl bis(2-methyl-2-propenoate), ethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, methyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

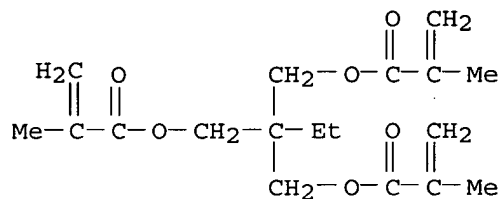
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CM 2

CRN 3290-92-4

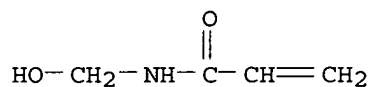
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CM 3

CRN 924-42-5

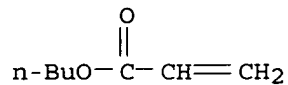
CMF C4 H7 N O2



CM 4

CRN 141-32-2

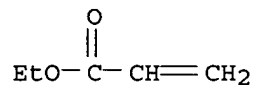
CMF C7 H12 O2



CM 5

CRN 140-88-5

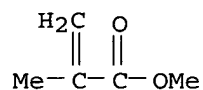
CMF C5 H8 O2



CM 6

CRN 80-62-6

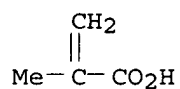
CMF C5 H8 O2



CM 7

CRN 79-41-4

CMF C4 H6 O2



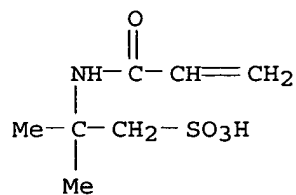
RN 229317-71-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, methyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

CMF C7 H13 N O4 S

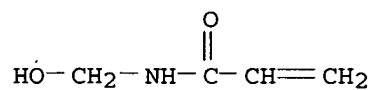


KOROMA EIC1700

CM 2

CRN 924-42-5

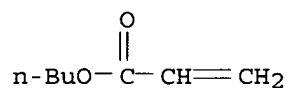
CMF C4 H7 N O2



CM 3

CRN 141-32-2

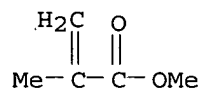
CMF C7 H12 O2



CM 4

CRN 80-62-6

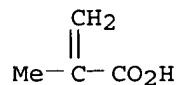
CMF C5 H8 O2



CM 5

CRN 79-41-4

CMF C4 H6 O2



RN 229317-72-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[[2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with butyl

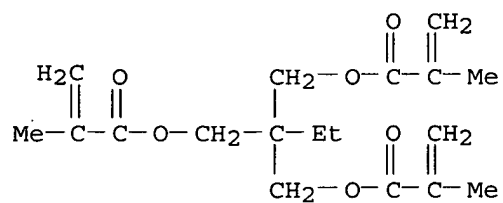
KOROMA EIC1700

2-propenoate, N-(hydroxymethyl)-2-propenamide and methyl  
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 3290-92-4

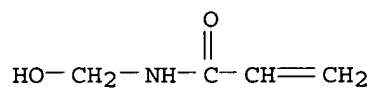
CMF C18 H26 O6



CM 2

CRN 924-42-5

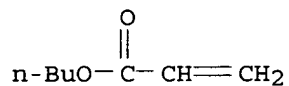
CMF C4 H7 N O2



CM 3

CRN 141-32-2

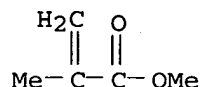
CMF C7 H12 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



IC ICM C04B028-02  
 ICS C04B018-14; C04B024-26; C04B103-60; C04B111-20  
 CC 58-1 (Cement, Concrete, and Related Building Materials)  
 Section cross-reference(s): 38  
 ST acrylate polymer slag cement paste compn  
 IT Cement (construction material)  
 Slags  
 (cement paste compns. contg. slag powder and  
 polymer emulsion for improving fluidity and strength)  
 IT 50657-41-5, Butyl acrylate-methyl methacrylate-trimethylolpropane  
 trimethacrylate copolymer  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (emulsion; high-fluidity cement paste compns.  
 contg. slag powder and)  
 IT 153344-70-8 229317-71-9 229317-72-0  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (high-fluidity cement paste compns. contg. slag  
 powder and)  
 IT 7631-86-9, Silica, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (in cement paste compns. contg. slag powder and  
 polymer emulsion for improving fluidity and strength)

L37 ANSWER 6 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:182483 CAPLUS

DOCUMENT NUMBER: 130:241133

TITLE: Polymer additives for cement to improve  
 strength

INVENTOR(S): Hayashi, Tetsushi; Nagao, Masahiro; Sato, Sumiaki

PATENT ASSIGNEE(S): Kuraray Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11071149	A2	19990316	JP 1997-229966	19970826
PRIORITY APPLN. INFO.:			JP 1997-229966	19970826

AB The title additives comprise vinyl alc.-based polymers contg. 0.1-45 mol%  
 structural unit CHR1CHR2(R1, R2 = H or Me; X = COOH). Alternatively,  
 claimed additives comprise above polymers, where X = CH2SO3H,  
 CONHMe2CH2SO3H, CH2OH, CH2CH2OH, CH2OCH2CH(OH)CH2OH, CONH2, CONMe2,  
 CH2NET3Cl, or CONH(CH2)3NMe3Cl. Thus, copolymer comprising 4.4 mol%

methacrylic acid unit and 95.6 mol% vinyl acetate unit was saponified to give modified poly(vinyl alc.) with sapon. 99.6 mol%. An aq. soln. contg. 10% resulting modified poly(vinyl alc.) 300, cement 3000, 20% aq. soln. of superplasticizer 75, and water 570 g were mixed, shaped and cured at 20.degree. to give a concrete having compressive strength at 7 and 28 days 56 and 70 N/mm<sup>2</sup>, resp., vs. 35 and 45 N/mm<sup>2</sup> without addn. of the above additive.

IT 79020-07-8D, saponified.

RL: MOA (Modifier or additive use); USES (Uses)

(vinyl alc.-based polymer additives for cement to improve strength)

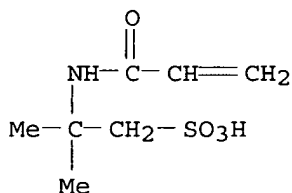
RN 79020-07-8 CAPLUS

CN Acetic acid ethenyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

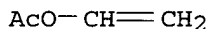


● Na

CM 2

CRN 108-05-4

CMF C4 H6 O2



IC ICM C04B024-26

ICS C04B103-60

CC 58-1 (Cement, Concrete, and Related Building Materials)

ST additive cement modified polyvinyl alc

IT Cement (construction material)

(vinyl alc.-based polymer additives for cement to improve strength)

IT 24980-63-0D, Methacrylic acid-vinyl acetate copolymer, saponified.

KOROMA EIC1700



79020-07-8D, sapond. 83293-28-1D, sapond. 194421-47-1D,  
sapond.  
RL: MOA (Modifier or additive use); USES (Uses)  
(vinyl alc.-based polymer additives for cement to improve  
strength)

L37 ANSWER 7 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:21701 CAPLUS  
DOCUMENT NUMBER: 130:99461  
TITLE: Additives for hydraulic compositions,  
preparation of the additives, and cement  
compositions containing the additives  
INVENTOR(S): Tahara, Hideyuki; Ito, Hiroshi; Mori, Yasuhiro;  
Mizushima, Makoto  
PATENT ASSIGNEE(S): Nippon Shokubai Kagaku Kogyo Co, Ltd., Japan  
SOURCE: U.S., 47 pp., Cont. of U.S. Ser. No. 498,704,  
abandoned.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5854318	A	19981229	US 1996-759435	19961205
US 5476885	A	19951219	US 1991-668513	19910325
PRIORITY APPLN. INFO.:			JP 1989-190656	19890725
			JP 1989-262242	19891009
			JP 1989-297455	19891117
			US 1991-668513	19910325
			US 1995-498704	19950703
			JP 1998-228313	19980905
			JP 1989-228313	19890905
			WO 1990-JP946	19900723

AB The hydraulic compns. comprise a hydraulic material, water, and an additive comprising a crosslinked polymer in which, between main chains having water-sol. polymer structure of wt.-av. mol. wt. 500-100,000, a bond having as a structural unit  $\text{--}\text{O--}\text{C}(\text{R}_1)\text{--}\text{C}(\text{R}_2)\text{--}$  having general formula  $\text{R}_1\text{CO}_2\text{R}_2$  [independently,  $\text{R}_1$ ,  $\text{R}_2$  is selected from  $\text{CH}_2$ ,  $\text{CH}(\text{R})$ ,  $\text{p-Ph}$ ,  $\text{CR}(\text{R}_1)$ , and  $\text{CH}_2\text{CH}(\text{OH})$ , with the proviso that  $\text{R}_1$  is not required if  $\text{R}_2$  is  $\text{CH}_2\text{CH}(\text{OH})$  (independently,  $\text{R}$ ,  $\text{R}_1$  = C1-5-alkyl)], and in which the main chains comprise  $\text{--}\text{O--}\text{C}(\text{R}_1)\text{--}\text{C}(\text{R}_2)\text{--}$  members selected from  $\text{CO}_2\text{M}$ ,  $\text{CO}_2(\text{R}_5)\text{mSO}_3\text{M}$ ,  $\text{CONHR}_7\text{SO}_3\text{M}$ ,  $(\text{CH}_2)_n\text{SO}_3\text{M}$ , and  $\text{p-Ph-SO}_3\text{M}$  ( $\text{m}$  = 0 or integral no. of 1-50;  $\text{n}$  = 0 or 1;  $\text{M}$  is  $\text{--}\text{O--}\text{C}(\text{R}_1)\text{--}\text{C}(\text{R}_2)\text{--}$  selected from H, mono-, di-, or trivalent metal,  $\text{NH}_4$ , and org. amine; independently,  $\text{R}_1$ ,  $\text{R}_6$  = C2-4-alkylene;  $\text{R}_7$  = C1-5-alkylene; with the proviso that when  $\text{m}$   $\text{--}\text{O--}\text{C}(\text{R}_1)\text{--}\text{C}(\text{R}_2)\text{--}$ , many of  $\text{R}_5$  may be the same or different, and, when many of  $\text{R}_5$  are different from one another, their arrangement may be regular or irregular), and in which the crosslinked polymer is capable of forming a water-sol. polymer by cleavage of the divalent group in an alk. medium. The additive are prep'd. by obtaining a crosslinked polymer by a polymg. a monomer contg.  $\text{--}\text{O--}\text{C}(\text{R}_1)\text{--}\text{C}(\text{R}_2)\text{--}$

polymerizable double bonds and has as structural unit .gtoreq.1 divalent groups as above, with a monomer having one polymerizable double bond capable of copolymg. with the double bonds and capable to form a main chain structure capable of leading to a water-sol. polymer as above. Into a reactor, contg. N-stirred boiling water 164.2 were introduced a soln. contg. NK-ester M-9G (methoxypolyethylene glycol monomethacrylate; av. added ethylene oxide mole no. is 9) 62.9, methacrylic acid 16.7, and water 125.5, and, in addn., 2.5% aq. (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> soln. 24.6 wt. parts over 4 h. Then, 6.1 wt. parts 2.5% aq. (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> soln. were added over 1 h, and the mixt. was maintained at the b.p. for 1 h to complete the polymn. reaction, whereby a water-sol. polymer was obtained. To this polymer were added 3.2 wt. parts Denacol EX-721 (o-phthalic acid diglycidyl ester) and the mixt. maintained at the b.p. for 3 h, and neutralized with aq. NaOH to obtain a hydrophilic resin. A concrete mix contg. portland cement 320, water 173, fine aggregate (sand) 934, and coarse aggregate (crushed stone) 876 kg/m<sup>3</sup>, and 0.12 wt.% hydrophilic resin as above had initial, and 60-, 90, and 120-min slump an air content 17.7 and 4.9, 19.3 and 5.2, 18.5 and 5.1, and 17.8 cm and 4.8%, and 28-day condensation strength 352 kg/cm<sup>2</sup> and begining and ending setting time 5:25 and 7 h and 18 min, vs. 18.2 and 4.8, 16.8 and 4.9, 14.2 and 4.6, and 10.4 and 4.2, and 338 and 5:24 and 7:19, resp.

IT 218956-51-5P 218956-53-7P 218956-55-9P  
218956-57-1P 218956-59-3P 218956-61-7P  
218956-63-9P 218956-65-1P 218957-11-0P  
218957-19-8P 218957-20-1P 218957-24-5P  
219320-31-7P

RL: IMF (Industrial manufacture); PREP (Preparation)  
(dispersant, manuf. of; for concrete, for slump loss prevention)

RN 218956-51-5 CAPLUS

CN 1,2-Benzenedicarboxylic acid, bis(oxiranylmethyl) ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-methyl-2-propenoic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 137112-29-9

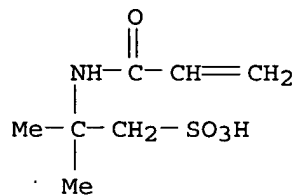
CMF (C14 H14 O6 . C7 H13 N O4 S . C4 H6 O2)x

CCI PMS

CM 2

CRN 15214-89-8

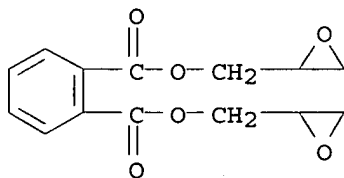
CMF C7 H13 N O4 S



CM 3

CRN 7195-45-1

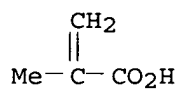
CMF C14 H14 O6



CM 4

CRN 79-41-4

CMF C4 H6 O2



RN 218956-53-7 CAPLUS

CN Hexanedioic acid, bis(oxiranylmethyl) ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-methyl-2-propenoic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 137112-30-2

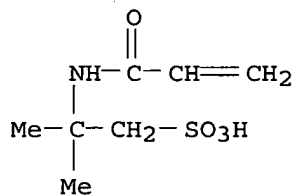
CMF (C12 H18 O6 . C7 H13 N O4 S . C4 H6 O2)x

CCI PMS

CM 2

CRN 15214-89-8

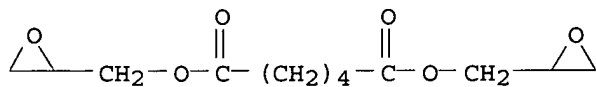
CMF C7 H13 N O4 S



CM 3

CRN 2754-17-8

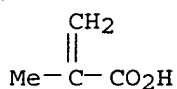
CMF C12 H18 O6



CM 4

CRN 79-41-4

CMF C4 H6 O2



RN 218956-55-9 CAPLUS

CN 1,2-Benzenedicarboxylic acid, bis(oxiranylmethyl) ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-methyl-2-propenoic acid, sodium salt (9CI)  
(CA INDEX NAME)

CM 1

CRN 137112-31-3

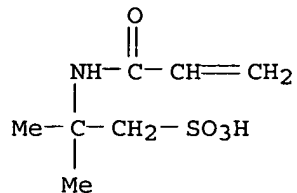
CMF (C14 H14 O6 . C7 H13 N O4 S . C6 H10 O3 . C4 H6 O2)x

CCI PMS

CM 2

CRN 15214-89-8

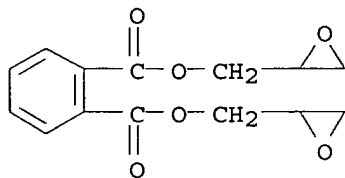
CMF C7 H13 N O4 S



CM 3

CRN 7195-45-1

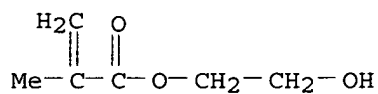
CMF C14 H14 O6



CM 4

CRN 868-77-9

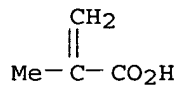
CMF C6 H10 O3



CM 5

CRN 79-41-4

CMF C4 H6 O2



RN 218956-57-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2,2'-[1,2-ethanediylbis(oxymethylene)]bis[oxirane], 2-hydroxyethyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-

KOROMA EIC1700

propanesulfonic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 218956-56-0

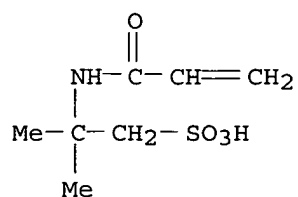
CMF (C8 H14 O4 . C7 H13 N O4 S . C6 H10 O3 . C4 H6 O2)x

CCI PMS

CM 2

CRN 15214-89-8

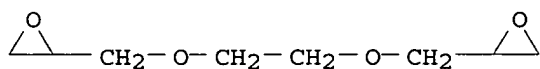
CMF C7 H13 N O4 S



CM 3

CRN 2224-15-9

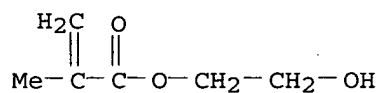
CMF C8 H14 O4



CM 4

CRN 868-77-9

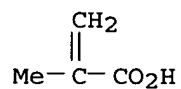
CMF C6 H10 O3



CM 5

CRN 79-41-4

CMF C4 H6 O2



RN 218956-59-3 CAPLUS

CN 1,2-Benzenedicarboxylic acid, bis(oxiranylmethyl) ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-propenoic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 137112-33-5

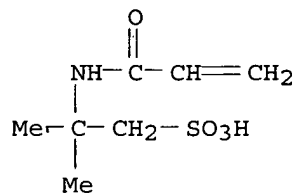
CMF (C14 H14 O6 . C7 H13 N O4 S . C3 H4 O2)x

CCI PMS

CM 2

CRN 15214-89-8

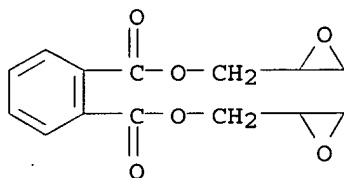
CMF C7 H13 N O4 S



CM 3

CRN 7195-45-1

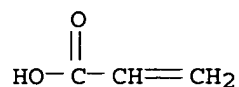
CMF C14 H14 O6



CM 4

CRN 79-10-7

CMF C3 H4 O2



RN 218956-61-7 CAPLUS

CN Hexanedioic acid, bis(oxiranylmethyl) ester, polymer with  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and  
2-propenoic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 137112-34-6

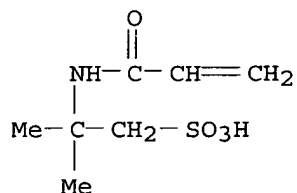
CMF (C12 H18 O6 . C7 H13 N O4 S . C3 H4 O2)x

CCI PMS

CM 2

CRN 15214-89-8

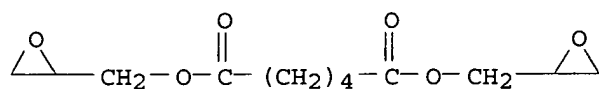
CMF C7 H13 N O4 S



CM 3

CRN 2754-17-8

CMF C12 H18 O6

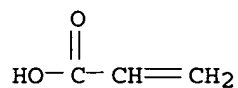


CM 4

CRN 79-10-7

CMF C3 H4 O2





RN 218956-63-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and .alpha.-(oxiranylmethyl)-.omega.-(oxiranylmethoxy)poly(oxy-1,2-ethanediyl), sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 137323-93-4

CMF (C7 H13 N O4 S . C4 H6 O2 . (C2 H4 O)n C6 H10 O3)x

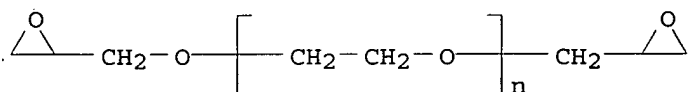
CCI PMS

CM 2

CRN 26403-72-5

CMF (C2 H4 O)n C6 H10 O3

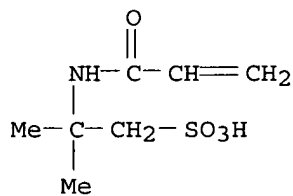
CCI PMS



CM 3

CRN 15214-89-8

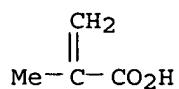
CMF C7 H13 N O4 S



CM 4

CRN 79-41-4

CMF C4 H6 O2



RN 218956-65-1 CAPLUS

CN 1,2-Benzenedicarboxylic acid, bis(oxiranylmethyl) ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-methoxypoly(oxy-1,2-ethanediyl) and 2-methyl-2-propenoic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 137112-35-7

CMF (C14 H14 O6 . C7 H13 N O4 S . C4 H6 O2 . (C2 H4 O)n C5 H8 O2)x

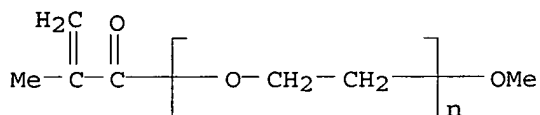
CCI PMS

CM 2

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

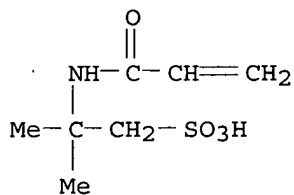
CCI PMS



CM 3

CRN 15214-89-8

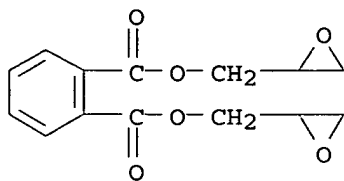
CMF C7 H13 N O4 S



CM 4

CRN 7195-45-1

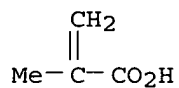
CMF C14 H14 O6



CM 5

CRN 79-41-4

CMF C4 H6 O2



RN 218957-11-0 CAPLUS

CN 1,2-Benzenedicarboxylic acid, bis(oxiranylmethyl) ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-methoxypoly(oxy-1,2-ethanediyl), 2-methyl-2-propenoic acid and sodium 2-methyl-2-propenoate, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 218957-10-9

CMF (C14 H14 O6 . C7 H13 N O4 S . C4 H6 O2 . C4 H6 O2 . (C2 H4 O)n C5 H8 O2 . Na)x

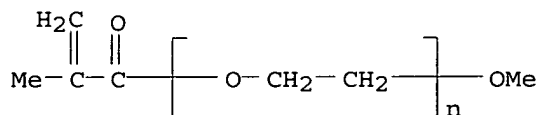
CCI PMS

CM 2

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

CCI PMS

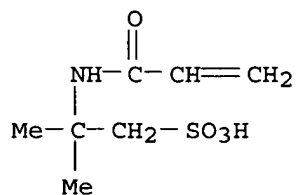


CM 3

CRN 15214-89-8

KOROMA EIC1700

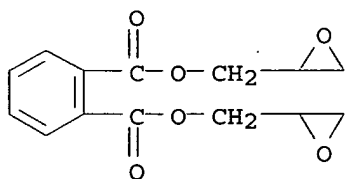
CMF C7 H13 N O4 S



CM 4

CRN 7195-45-1

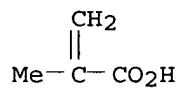
CMF C14 H14 O6



CM 5

CRN 5536-61-8

CMF C4 H6 O2 . Na

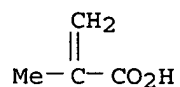


● Na

CM 6

CRN 79-41-4

CMF C4 H6 O2



RN 218957-19-8 CAPLUS

CN Benzoic acid, 4-(oxiranylmethoxy)-, oxiranylmethyl ester, polymer with N-[2-(dimethylamino)ethyl]-2-methyl-2-propenamide and 2-propenoic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 218957-18-7

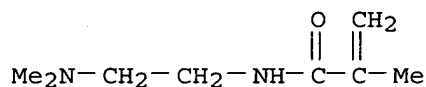
CMF (C13 H14 O5 . C8 H16 N2 O . C3 H4 O2)x

CCI PMS

CM 2

CRN 13081-44-2

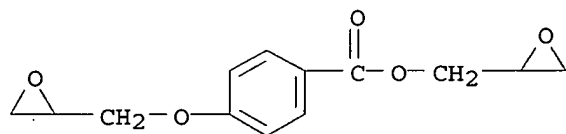
CMF C8 H16 N2 O



CM 3

CRN 7042-93-5

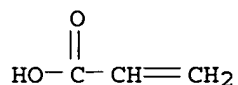
CMF C13 H14 O5



CM 4

CRN 79-10-7

CMF C3 H4 O2



RN 218957-20-1 CAPLUS

CN Hexanedioic acid, bis[2,2-dimethyl-3-[(1-oxo-2-propenyl)oxy]propyl] ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-methoxypoly(oxy-1,2-ethanediyl), 2-methyl-2-propenoic acid and sodium 2-methyl-2-propenoate, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 219503-14-7

CMF (C22 H34 O8 . C7 H13 N O4 S . C4 H6 O2 . C4 H6 O2 . (C2 H4 O)n C5 H8 O2 . Na)x

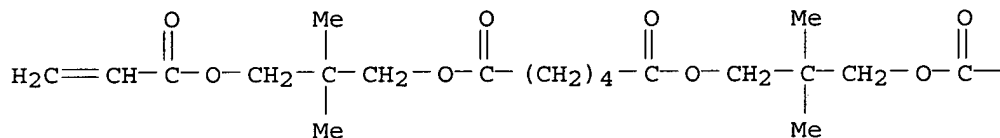
CCI PMS

CM 2

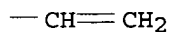
CRN 45302-29-2

CMF C22 H34 O8

PAGE 1-A



PAGE 1-B

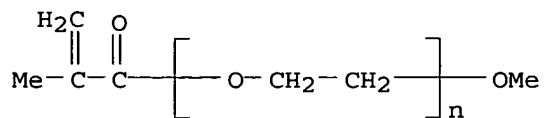


CM 3

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

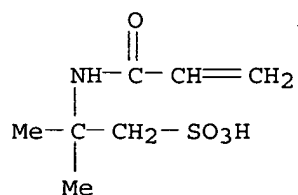
CCI PMS



CM 4

CRN 15214-89-8

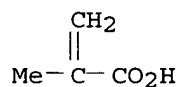
CMF C7 H13 N O4 S



CM 5

CRN 5536-61-8

CMF C4 H6 O2 . Na

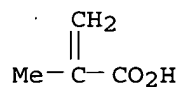


● Na

CM 6

CRN 79-41-4

CMF C4 H6 O2



RN 218957-24-5 CAPLUS

CN Hexanedioic acid, bis[2,2-dimethyl-3-[(1-oxo-2-propenyl)oxy]propyl] ester,

KOROMA EIC1700

polymer with N-[2-(dimethylamino)ethyl]-2-methyl-2-propenamide,  
 .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-methoxypoly(oxy-1,2-  
 ethanediyl), 2-methyl-2-propenoic acid and sodium 2-methyl-2-propenoate,  
 sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 219503-27-2

CMF (C22 H34 O8 . C8 H16 N2 O . C4 H6 O2 . C4 H6 O2 . (C2 H4 O)n C5 H8 O2  
 . Na)x

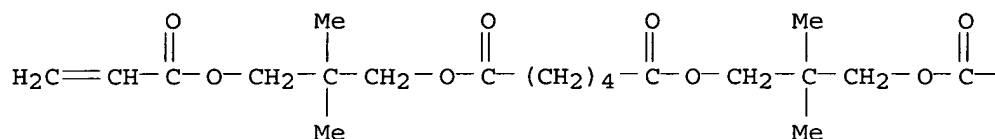
CCI PMS

CM 2

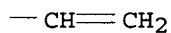
CRN 45302-29-2

CMF C22 H34 O8

PAGE 1-A



PAGE 1-B

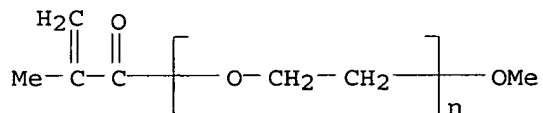


CM 3

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

CCI PMS

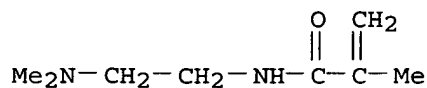


CM 4

CRN 13081-44-2

CMF C8 H16 N2 O

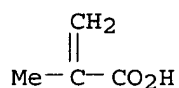




CM 5

CRN 5536-61-8

CMF C4 H6 O2 . Na

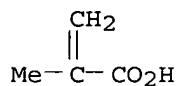


● Na

CM 6

CRN 79-41-4

CMF C4 H6 O2



RN 219320-31-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with N-[2-(dimethylamino)ethyl]-2-methyl-2-propenamamide, .alpha.-[2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]-.omega.-[2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propoxy]poly(oxy-1,2-ethanediyl), .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-methoxypoly(oxy-1,2-ethanediyl) and sodium 2-methyl-2-propenoate, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 219320-30-6

CMF (C8 H16 N2 O . C4 H6 O2 . C4 H6 O2 . (C2 H4 O)n C14 H22 O7 . (C2 H4 O)n C5 H8 O2 . Na)x

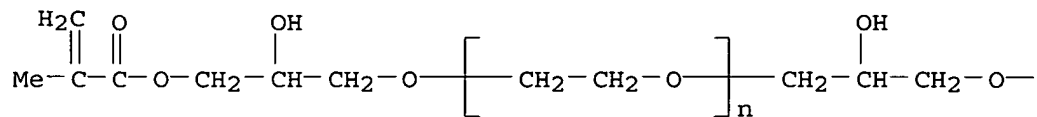
CCI PMS

CM 2

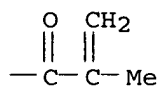
KOROMA EIC1700

CRN 79134-44-4  
 CMF (C2 H4 O)n C14 H22 O7  
 CCI PMS

PAGE 1-A

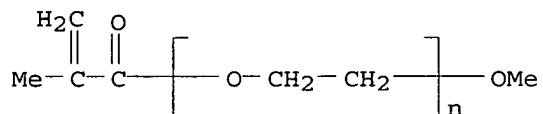


PAGE 1-B



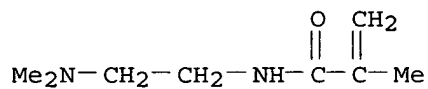
CM 3

CRN 26915-72-0  
 CMF (C2 H4 O)n C5 H8 O2  
 CCI PMS



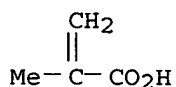
CM 4

CRN 13081-44-2  
 CMF C8 H16 N2 O



CM 5

CRN 5536-61-8  
 CMF C4 H6 O2 . Na

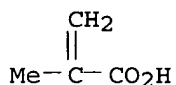


● Na

CM 6

CRN 79-41-4

CMF C4 H6 O2



IC ICM C08K003-00

ICS C04B028-00; C08F220-00

NCL 524005000

CC 58-2 (Cement, Concrete, and Related Building Materials)

Section cross-reference(s): 38

ST copolymer dispersant **cement concrete**; NK ester M 9G  
 23G methacrylic acid copolymer; hydroxyethyl methacrylate copolymer;  
 crosslinking agent Denacol EX acrylic copolymer; acrylic copolymer sodium  
 salt dispersant; ethylene oxide propylene oxide copolymer; Blenmer 70PEP  
 350B copolymer; methoxypolyethyleneglycol methacrylate copolymer; Denacol  
 EX 202 611 701 721 810 841 861; acrylamidomethylpropanesulfonic acid  
 copolymer; sulfoethylmethacrylate acrylic acid copolymer;  
 sulfopropoxyethyleneglycol acrylate copolymer; Kayarad R 526 Manda HX 202  
 copolymer; formaldehyde naphthalenesulfonate dispersant; lignosulfonic  
 acid sodium salt dispersant; dimethylaminoethyl methacrylate copolymer;  
 polyethyleneoxide monoallyl ether copolymer; maleic acid copolymer Denacol  
 830; ethyleneimine ethylene copolymer; styrenesulfonate olefin copolymer;  
 vinylsulfonic acid copolymer; diethylaminoethylmethacrylamide copolymer;  
 DA 721 sulfoethylmethacrylate copolymer; DM 832 copolymer dispersant

IT Epoxy resins, preparation

Polyoxyalkylenes, preparation

RL: IMF (Industrial manufacture); PREP (Preparation)

(acrylic, dispersants, manuf. of; for **concrete**, for slump  
 loss prevention)

IT Polyoxyalkylenes, preparation

Polyoxyalkylenes, preparation

RL: IMF (Industrial manufacture); PREP (Preparation)

(acrylic-epoxy, dispersants, manuf. of; for **concrete**, for  
 slump loss prevention)

IT Epoxy resins, preparation

Epoxy resins, preparation

KOROMA EIC1700

RL: IMF (Industrial manufacture); PREP (Preparation)  
 (acrylic-polyoxyalkylene-, dispersants, manuf. of; for **concrete**  
 , for slump loss prevention)

IT Polyoxyalkylenes, preparation  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (allyl group-contg., polymers with Denacol EX 202 and maleic acid,  
 sodium salts, dispersants, manuf. of; for **concrete**, for slump  
 loss prevention)

IT **Cement** (construction material)  
 (crosslinked acrylic copolymer dispersants for)

IT **Concrete**  
 (crosslinked acrylic copolymer dispersants for **cement** in)

IT Dispersing agents  
 Plasticizers  
 (crosslinked acrylic copolymer dispersants; manuf. of, for  
**concrete**, for slump loss prevention)

IT Polyoxyalkylenes, preparation  
 Polyoxyalkylenes, preparation  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (epoxy, dispersants, manuf. of; for **concrete**, for slump loss  
 prevention)

IT Epoxy resins, preparation  
 Epoxy resins, preparation  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (polyoxyalkylene-, dispersants, manuf. of; for **concrete**, for  
 slump loss prevention)

IT 110-16-7DP, Maleic acid, polymers with Denacol EX-202 and polyalkylene  
 glycol monoallyl ethers, sodium salts 2867-47-2DP, N,N-  
 Dimethylaminoethyl methacrylate, quaternized, polymers with Denacol EX-721  
 and sodium acrylate 7446-81-3DP, Sodium acrylate, polymers with Denacol  
 EX-721 and quaternized dimethylaminoethyl methacrylate 37099-12-0DP,  
 Denacol EX-721, polymers with quaternized dimethylaminoethyl methacrylate  
 and sodium acrylate 54590-60-2DP, Denacol EX-202, polymers with maleic  
 acid and polyalkylene glycol monoallyl ethers, sodium salts 80833-82-5P,  
 Acrylic acid-Denacol EX-841 copolymer sodium salt 136673-67-1P, Denacol  
 EX-721-methacrylic acid-polyethyleneglycol polypropyleneglycol  
 methacrylate copolymer 137112-16-4P, Acrylic acid-ethyleneimine-Denacol  
 EX-202-sodium acrylate copolymer 137112-17-5P, Denacol  
 EX-202-ethyleneimine-methacrylic acid copolymer 137112-19-7P, Denacol  
 EX-721-ethyleneimine-maleic anhydride-styrene copolymer 137112-27-7P,  
 Denacol EX-861-methacrylic acid-polyethyleneglycol polypropyleneglycol  
 methacrylate copolymer 137213-43-5P, Denacol EX-202-polyethyleneglycol  
 monoallyl ether-sodium acrylate copolymer 218956-35-5P 218956-37-7P  
 218956-39-9P 218956-41-3P 218956-43-5P 218956-45-7P 218956-47-9P  
 218956-49-1P 218956-51-5P 218956-53-7P  
 218956-55-9P 218956-57-1P 218956-59-3P  
 218956-61-7P 218956-63-9P 218956-65-1P  
 218956-67-3P 218956-69-5P 218956-71-9P 218956-73-1P 218956-75-3P  
 218956-77-5P 218956-78-6P 218956-79-7P 218956-82-2P 218956-83-3P  
 218956-89-9P, Denacol EX-202-polyethyleneglycol monoallyl ether-sodium  
 methacrylate copolymer 218956-91-3P, Denacol EX-830-polyethyleneglycol  
 monoallyl ether-sodium methacrylate copolymer 218956-97-9P

218957-02-9P 218957-05-2P 218957-08-5P 218957-11-0P  
 218957-14-3P 218957-17-6P 218957-19-8P 218957-20-1P  
 218957-22-3P 218957-24-5P 218957-26-7P 218957-28-9P  
 219316-95-7P 219320-31-7P 219320-37-3P 219320-39-5P  
 219320-40-8P 219478-34-9P

RL: IMF (Industrial manufacture); PREP (Preparation)  
 (dispersant, manuf. of; for concrete, for slump loss prevention)

IT 8061-51-6, Sodium lignosulfonate 9008-63-3, Formaldehyde-sodium naphthalenesulfonate copolymer

RL: NUU (Other use, unclassified); USES (Uses)  
 (dispersants contg. crosslinked acrylic polymers and; for concrete, for slump loss prevention)

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 8 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:585988 CAPLUS

DOCUMENT NUMBER: 129:192658

TITLE: The use of copolymers containing ethylenically unsaturated monocarboxylic acids, their hydroxyalkyl esters, and other monomers, as additives in mineral building material compositions, and the building materials obtained

INVENTOR(S): Pakusch, Joachim; Angel, Maximilian; Claassen, Peter; Dragon, Andree

PATENT ASSIGNEE(S): BASF A.-G., Germany

SOURCE: Ger. Offen., 10 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

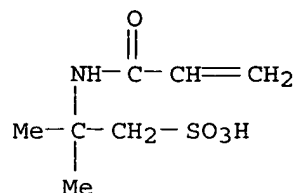
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19807909	A1	19980827	DE 1998-19807909	19980225
PRIORITY APPLN. INFO.:			DE 1997-19707747	19970226
AB The copolymers contain .gtoreq.1 ethylenically unsatd. C3-6-monocarboxylic acids or their salts 40.5-49.5, .gtoreq.1 hydroxyalkyl esters of ethylenically unsatd. C3-6-monocarboxylic acids 50.5-59.5, and addnl. monomers .ltoreq.9 mol.%, and have wt.-av. mol. wt. 20,000-70,000 and nonuniformity ratio 3-10. The binder of the mineral building materials may contain 70 wt.% cement.				
IT 119280-02-3				
RL: MOA (Modifier or additive use); USES (Uses) (as additive to cementitious compns. for workability)				
RN 119280-02-3 CAPLUS				
CN 2-Propenoic acid, polymer with 2-hydroxypropyl 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)				

CM 1

CRN 15214-89-8

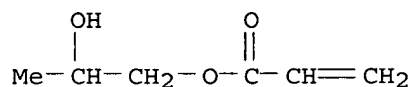
CMF C7 H13 N O4 S



CM 2

CRN 999-61-1

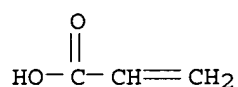
CMF C6 H10 O3



CM 3

CRN 79-10-7

CMF C3 H4 O2



IC ICM C04B024-26

ICS C08F220-28

ICI C08F220-28, C08F220-06; C08F222-02, C08F210-00, C08F212-00, C08F218-04, C08F220-18, C08F222-10, C08F220-42, C08F220-54, C08F222-04, C08F226-06

CC 58-3 (Cement, Concrete, and Related Building Materials)

ST unsatd monocarboxylic acid copolymer; hydroxyalkyl ester copolymer  
**cement** binder; acrylic acid hydroxyethylmethacrylate copolymer;  
 hydroxypropylacrylate copolymer; acrylamido methylpropanesulfonic acid  
 copolymer

IT **Cement** (construction material)

(aluminous, **compns.** contg.; copolymers of unsatd. carboxylic  
 acids with hydroxyalkyl esters of unsatd. carboxylic acids with  
 hydroxyalkyl esters, and other monomers as additive for workability in)

KOROMA EIC1700

- IT Antifoaming agents  
(**cementitious compns.** contg.; copolymers of unsatd. carboxylic acids with hydroxyalkyl esters of unsatd. carboxylic acids with hydroxyalkyl esters, and other monomers as additive for workability in)
- IT **Cement** (construction material)  
(**compns.** contg.; copolymers of unsatd. carboxylic acids with hydroxyalkyl esters of unsatd. carboxylic acids with hydroxyalkyl esters, and other monomers as additive for workability in)
- IT Carboxylic acids, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(unsatd., esters, polymers with unsatd. monocarboxylic acids; as additives to **cementitious compns.** for workability)
- IT Carboxylic acids, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(unsatd., polymers, with esters of unsatd. monocarboxylic acids; as additives to **cementitious compns.** for workability)
- IT 27175-46-8, Acrylic acid-2-hydroxyethylmethacrylate copolymer 80675-35-0  
105523-91-9, 2-Hydroxyethylmethacrylate-sodium acrylate copolymer  
119280-02-3 211690-63-0  
RL: MOA (Modifier or additive use); USES (Uses)  
(as additive to **cementitious compns.** for workability)
- IT 9004-32-4, CMC  
RL: MOA (Modifier or additive use); USES (Uses)  
(**cementitious compns.** contg.; copolymers of unsatd. carboxylic acids with hydroxyalkyl esters of unsatd. carboxylic acids with hydroxyalkyl esters, and other monomers as additive for workability in)
- IT 87-69-4, uses 471-34-1, Calcium carbonate, uses 497-19-8, Sodium carbonate, uses 554-13-2, Lithium carbonate 1305-62-0, Calcium hydroxide, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**cementitious compns.** contg.; copolymers of unsatd. carboxylic acids with hydroxyalkyl esters of unsatd. carboxylic acids with hydroxyalkyl esters, and other monomers as additive for workability in)

L37 ANSWER 9 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:28722 CAPLUS

DOCUMENT NUMBER: 128:131520

TITLE: Admixtures for **concrete** and their use, and method for dispersing **cement** with, and **concrete** containing, the admixtures

INVENTOR(S): Satoh, Haruyuki; Yamato, Fujio; Kono, Yoshinao; Nakamura, Sayuri

PATENT ASSIGNEE(S): Kao Corp., Japan; Satoh, Haruyuki; Yamato, Fujio; Kono, Yoshinao; Nakamura, Sayuri

SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9748656	A1	19971224	WO 1997-JP2095	19970618
W: CN, US, VN				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 10081549	A2	19980331	JP 1997-150709	19970609
TW 379208	B	20000111	TW 1997-86108064	19970611
EP 846090	A1	19980610	EP 1997-927384	19970618
R: DE, FR, GB				
US 5911820	A	19990615	US 1998-29031	19980220
PRIORITY APPLN. INFO.:			JP 1996-161287	A 19960621
			WO 1997-JP2095	W 19970618

AB The admixt. comprise a copolymer comprising, as structural units, units derived from an ethylenically unsatd. monomer (a) contg. 25-300 mols C2-3-oxyalkylene groups, and units derived from a monomer (b) of an alkyl, alkenyl or hydroxyalkyl ester of an ethylenically unsatd. mono- or dicarboxylic acid. The admixts. are effective in imparting fluidity to hydraulic **compns.**, e.g., **cement** pastes, mortar, and **concrete**, esp. in maintaining fluidity of the **compns.**, and hardly retard hardening of the **compns.** A **cement compn.** contg. 0.27% methoxypolyethylene glycol methacrylate-Me acrylate copolymer telomer with 2-mercaptoethanol gave slump after 120 min 22.5 cm and initial and final setting time 4 h 52 min and 6 h 31 min, vs. 7.0 cm, and 7 h 20 min and 8 h 58 min for a control.

IT 201793-18-2P 201793-20-6P 201793-30-8P  
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)  
 (dispersant; for **concrete**)

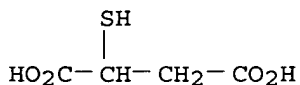
RN 201793-18-2 CAPLUS

CN 2-Butenedioic acid (2Z)-, monosodium salt, telomer with .alpha.-[(2Z)-3-carboxy-1-oxo-2-propenyl]-.omega.-hydroxypoly(oxy-1,2-ethanediyl), mercaptobutanedioic acid sodium salt and methyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 22275-72-5

CMF C4 H6 O4 S . x Na



●x Na



CM 2

CRN 201793-17-1

CMF (C4 H6 O2 . C4 H4 O4 . (C2 H4 O)n C4 H4 O4 . Na)x

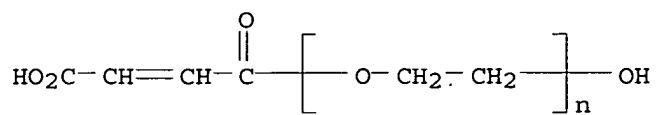
CCI PMS

CM 3

CRN 37916-19-1

CMF (C2 H4 O)n C4 H4 O4

CCI PMS

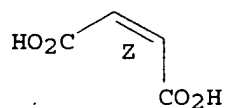


CM 4

CRN 3105-55-3

CMF C4 H4 O4 . Na

Double bond geometry as shown.

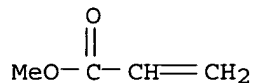


● Na

CM 5

CRN 96-33-3

CMF C4 H6 O2



RN 201793-20-6 CAPLUS

CN 2-Butenedioic acid (2Z)-, monosodium salt, telomer with mercaptobutanedioic acid sodium salt, methyl 2-propenoate and

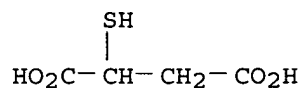
KOROMA EIC1700

.alpha.-2-propenyl-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA  
INDEX NAME)

CM 1

CRN 22275-72-5

CMF C4 H6 O4 S . x Na



●x Na

CM 2

CRN 201793-19-3

CMF (C4 H6 O2 . C4 H4 O4 . (C2 H4 O)n C3 H6 O . Na)x

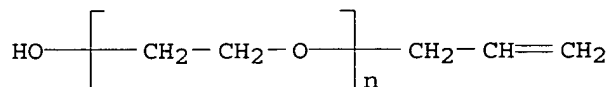
CCI PMS

CM 3

CRN 27274-31-3

CMF (C2 H4 O)n C3 H6 O

CCI PMS

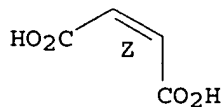


CM 4

CRN 3105-55-3

CMF C4 H4 O4 . Na

Double bond geometry as shown.

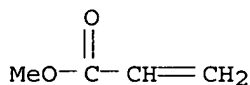


● Na

CM 5

CRN 96-33-3

CMF C4 H6 O2



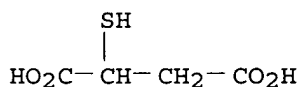
RN 201793-30-8 CAPLUS

CN Butanedioic acid, mercapto-, sodium salt, telomer with methyl 2-propenoate, 2-methyl-2-propenoic acid and .alpha.,.alpha.'-[[[(1-oxo-2-propenyl)imino]di-2,1-ethanediyl]bis[.omega.-hydroxypoly(oxy-1,2-ethanediyl)]] (9CI) (CA INDEX NAME)

CM 1

CRN 22275-72-5

CMF C4 H6 O4 S . x Na



●x Na

CM 2

CRN 201793-29-5

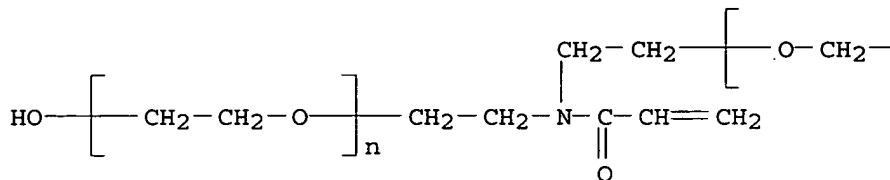
CMF (C4 H6 O2 . C4 H6 O2 . (C2 H4 O)n (C2 H4 O)n C7 H13 N O3)x

CCI PMS

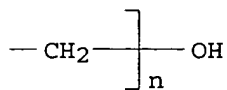
CM 3

CRN 51601-34-4  
 CMF (C2 H4 O)n (C2 H4 O)n C7 H13 N O3  
 CCI PMS

PAGE 1-A

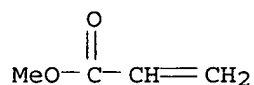


PAGE 1-B



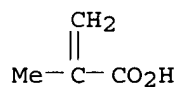
CM 4

CRN 96-33-3  
 CMF C4 H6 O2



CM 5

CRN 79-41-4  
 CMF C4 H6 O2



IC ICM C04B024-26  
 CC 58-2 (Cement, Concrete, and Related Building Materials)  
 ST acrylic polymer telomer **concrete** slump; **cement**  
 dispersant acrylic polymer telomer  
 IT **Cement** (construction material)  
**Concrete**  
 (acrylic telomers as dispersants for)

KOROMA EIC1700

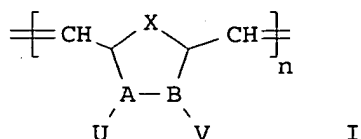
IT Dispersing agents  
 (acrylic telomers; for concrete)  
 IT 201793-10-4P 201793-11-5P 201793-12-6P 201793-14-8P 201793-16-0P  
 201793-18-2P 201793-20-6P 201793-21-7P 201793-23-9P  
 201793-24-0P 201793-25-1P 201793-26-2P 201793-30-8P  
 201872-78-8P  
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP  
 (Preparation)  
 (dispersant; for concrete)

L37 ANSWER 10 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1997:667768 CAPLUS  
 DOCUMENT NUMBER: 127:311473  
 TITLE: Functionalized polymer for use in dental adhesives  
 INVENTOR(S): Rheinberger, Volker; Moszner, Norbert; Stelzer, Franz;  
 Schitter, Regina; Zeuner, Frank  
 PATENT ASSIGNEE(S): Ivoclar Ag, Liechtenstein  
 SOURCE: Eur. Pat. Appl., 17 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 796607	A2	19970924	EP 1997-250080	19970317
EP 796607	A3	19971210		
EP 796607	B1	20030212		
R: AT, CH, DE, FR, GB, IT, LI, SE				
DE 19616183	A1	19970925	DE 1996-19616183	19960412
DE 19616183	C2	19990512		
CA 2199567	AA	19970920	CA 1997-2199567	19970310
CA 2199567	C	20030114		
AT 232377	E	20030215	AT 1997-250080	19970317
JP 10030018	A2	19980203	JP 1997-65063	19970318
JP 3106111	B2	20001106		
US 2002143118	A1	20021003	US 1999-377977	19990820
US 6479592	B2	20021112		

PRIORITY APPLN. INFO.: DE 1996-19613017 A 19960320  
 DE 1996-19616183 A 19960412  
 US 1997-819504 B1 19970317

GI



AB Ring-contg. polymers I [X = CH<sub>2</sub>, O; AB = CHCH, C:C; U = CO<sub>2</sub>H, CO<sub>2</sub>R<sub>3</sub>, YP; Y = CH<sub>2</sub>O, C(O)O, C(O)OR<sub>10</sub>; P = CH<sub>2</sub>:CHC(O), CH<sub>2</sub>:CMeC(O), CH<sub>2</sub>:CHCH<sub>2</sub>, CH<sub>2</sub>:CHC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>; V = H, CO<sub>2</sub>H, CH<sub>2</sub>OH, R<sub>3</sub>, OR<sub>2</sub>, C(O)OR<sub>2</sub>; or UV = C(O)TC(O); T = O, NH, NR<sub>3</sub>; R<sub>1</sub> = (substituted) C1-5 alkylene or oxyalkylene; R<sub>2</sub> = (substituted) C1-12 alkyl; R<sub>3</sub> = R<sub>2</sub>, C<sub>6</sub>-14 aryl], prepd. by ring-opening radical polymn. of unsatd. bicyclo[2.2.1] compds. at room temp., adhere strongly to a variety of substrates, form **cements** when combined with reactive fillers, and are useful as components of coatings, **cements**, adhesives, and **composites** esp. for dental use.

Thus, 5-norbornene-2,3-endo/exo-dicarboxylic acid underwent addn. to 3,4-dihydro-2H-pyran in the presence of pyridinium tosylate to form bis(tetrahydropyran-2-yl) 5-norbornene-2,3-endo/exo-dicarboxylate (II). II underwent metathetic ring-opening polymn. with 5-norbornene-2-endo/exo-Me methacrylate (prepn. given) in the presence of catalytic amts. of the Mo carbene complex III (prepn. given), followed by cleavage of the tetrahydropyranyl groups with p-toluenesulfonic acid, to form a copolymer of I (X = CH<sub>2</sub>, AB = CHCH, U = V = CO<sub>2</sub>H) and I (X = CH<sub>2</sub>, AB = CHCH, U = CH<sub>2</sub>:CMeC(O)OCH<sub>2</sub>, V = H). A dental adhesive contg. this copolymer 18.0, deionized water 32.4, 2-hydroxyethyl methacrylate 44.2, maleic acid 3.0, camphorquinone 0.3, hydroquinone mono-Me ether 0.1, NH<sub>4</sub>F 1.0, and diphenyliodonium hexafluorophosphate 1.0 wt.% was applied to the dentin surface of extd. teeth, photopolymd., and coated with a com. filling **composite** (Compoglass) which was also photopolymd. The shear strength of the resulting **composite** structure was 15.6 MPa.

IT 197304-19-1P 197304-20-4P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(functionalized polymer for dental adhesives)

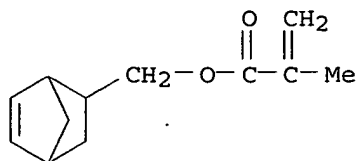
RN 197304-19-1 CAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, polymer with bicyclo[2.2.1]hept-5-en-2-ylmethyl 2-methyl-2-propenoate, (2Z)-2-butenedioic acid and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 36578-43-5

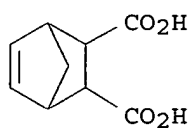
CMF C12 H16 O2



CM 2

CRN 3813-52-3

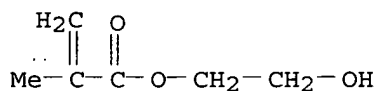
CMF C9 H10 O4



CM 3

CRN 868-77-9

CMF C6 H10 O3

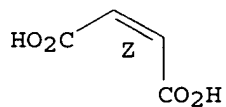


CM 4

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



RN 197304-20-4 CAPLUS

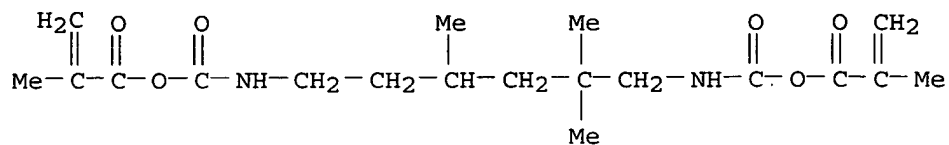
CN Bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, polymer with bicyclo[2.2.1]hept-5-en-2-ylmethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid dianhydride with (2,2,4-trimethyl-1,6-hexanediyl)bis[carbamic acid] (9CI) (CA INDEX NAME)

KOROMA EIC1700

CM 1

CRN 186314-70-5

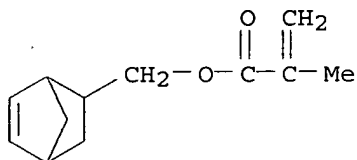
CMF C19 H30 N2 O6



CM 2

CRN 36578-43-5

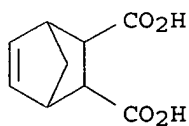
CMF C12 H16 O2



CM 3

CRN 3813-52-3

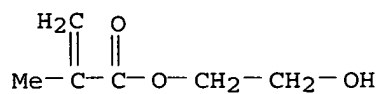
CMF C9 H10 O4



CM 4

CRN 868-77-9

CMF C6 H10 O3



KOROMA EIC1700



IC ICM A61K006-00  
ICS C08G061-00

CC 63-7 (Pharmaceuticals)  
Section cross-reference(s): 35

ST acrylic polymer dental adhesive; polyacrylate dental adhesive;  
norbornenecarboxylate polymer dental adhesive

IT Dental materials and appliances  
(adhesives; functionalized polymer for dental adhesives)

IT Bicyclic compounds  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(alicyclic; functionalized polymer for dental adhesives)

IT Heterocyclic compounds  
Heterocyclic compounds  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(bicyclic, oxa; functionalized polymer for dental adhesives)

IT Alicyclic compounds  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(bicyclic; functionalized polymer for dental adhesives)

IT Dental materials and appliances  
(cements; functionalized polymer for dental adhesives)

IT Dental materials and appliances  
(composites; functionalized polymer for dental adhesives)

IT Adhesives  
Coating materials  
Composites  
Dental materials and appliances  
(functionalized polymer for dental adhesives)

IT Acrylic polymers, biological studies  
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(functionalized polymer for dental adhesives)

IT Bicyclic compounds  
Bicyclic compounds  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(heterocyclic, oxa; functionalized polymer for dental adhesives)

IT Polymerization  
(metathetic, ring-opening; functionalized polymer for dental adhesives)

IT Vinyl compounds, biological studies  
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(polymers; functionalized polymer for dental adhesives)

IT Dental materials and appliances  
(resins; functionalized polymer for dental adhesives)

IT 108945-98-8P  
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)  
(functionalized polymer for dental adhesives)

IT 95-12-5, 2-(Hydroxymethyl)-5-norbornene 106-91-2 110-87-2,  
3,4-Dihydro-2H-pyran 920-46-7, Methacryloyl chloride 3813-52-3,  
5-Norbornene-2,3-dicarboxylic acid 5629-08-3, 7-Oxabicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid 98171-13-2 196941-77-2

RL: RCT (Reactant); RACT (Reactant or reagent)  
(functionalized polymer for dental adhesives)

IT 36578-43-5P 196941-84-1P 197303-91-6P 197303-93-8P 197304-05-5P  
197304-08-8P 197304-13-5P 197304-16-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(functionalized polymer for dental adhesives)

IT 197304-19-1P 197304-20-4P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation);  
USES (Uses)  
(functionalized polymer for dental adhesives)

L37 ANSWER 11 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:72163 CAPLUS

DOCUMENT NUMBER: 126:94833

TITLE: Dental **cement compositions**

INVENTOR(S): Yoshikawa, Jun; Tozaki, Satoshi; Hirota, Kazuo

PATENT ASSIGNEE(S): G C Dental Ind Corp, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

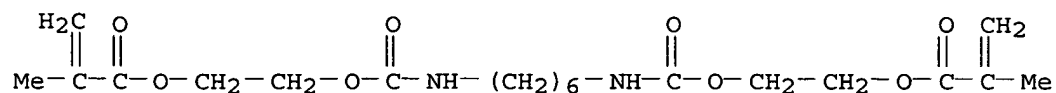
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

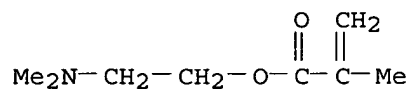
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08301717	A2	19961119	JP 1995-128764	19950501
PRIORITY APPLN. INFO.:			JP 1995-128764	19950501
AB Dental <b>cement compns.</b> with improved adhesive strength comprise .alpha.-.beta. unsatd. carboxlic acids, CH <sub>2</sub> :C(R <sub>1</sub> )COO [R <sub>1</sub> = H or Me] group-contg. polymerizable compds. and specified sulfoxide compds. with addn. of water, catalysts, and oxide powders.				
IT 185612-09-3P 185612-10-6P 185612-12-8P 185612-14-0P 185612-15-1P 185612-16-2P 185612-18-4P 185612-19-5P 185612-20-8P				
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (dental <b>cement compns.</b> )				
RN 185612-09-3 CAPLUS				
CN 11,14-Dioxa-2,9-diazaheptadec-16-enoic acid, 16-methyl-10,15-dioxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 2,2-dimethyl-1,3-propanediyl di-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)				
CM 1				
CRN 34100-36-2				
CMF C20 H32 N2 O8				



CM 2

CRN 2867-47-2

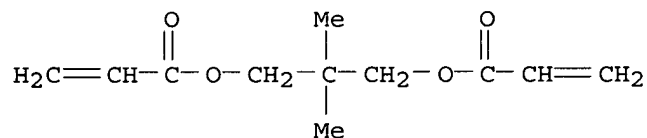
CMF C8 H15 N O2



CM 3

CRN 2223-82-7

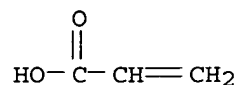
CMF C11 H16 O4



CM 4

CRN 79-10-7

CMF C3 H4 O2



RN 185612-10-6 CAPLUS

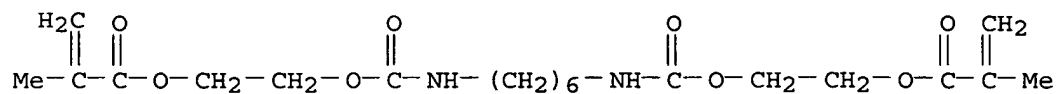
CN 2-Butenedioic acid (2Z)-, polymer with 2,2-dimethyl-1,3-propanediyl di-2-propenoate, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 16-methyl-10,15-dioxo-11,14-dioxo-2,9-diazaheptadec-16-enoate and 2-(methylsulfinyl)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 34100-36-2

KOROMA EIC1700

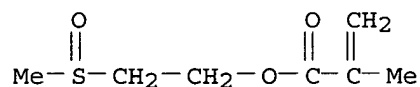
CMF C20 H32 N2 O8



CM 2

CRN 14794-09-3

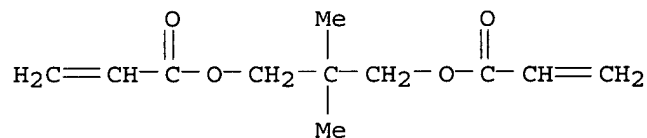
CMF C7 H12 O3 S



CM 3

CRN 2223-82-7

CMF C11 H16 O4

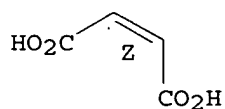


CM 4

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



RN 185612-12-8 CAPLUS

CN 2-Butenedioic acid (2Z)-, polymer with 1,6-hexanediylbis[imino(2-methyl-3-oxo-3,1-propanediyl)] bis(2-methyl-2-propenoate), (1-methylethyldene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)]

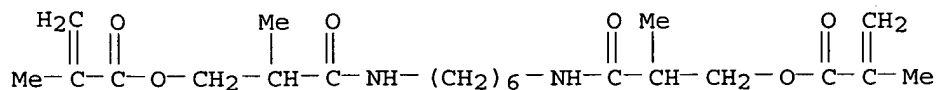
KOROMA EIC1700

bis(2-methyl-2-propenoate) and 2-methyl-N-[2-(methylthio)ethyl]-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 185612-11-7

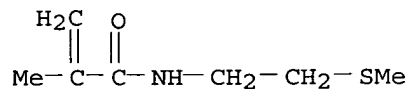
CMF C22 H36 N2 O6



CM 2

CRN 112065-33-5

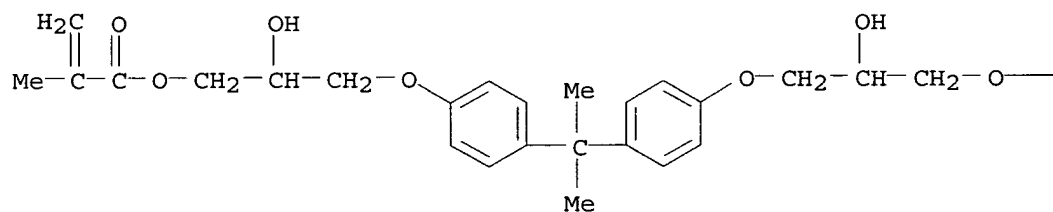
CMF C7 H13 N O S



CM 3

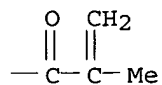
CRN 1565-94-2

CMF C29 H36 O8



PAGE 1-A

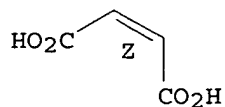
PAGE 1-B



CM 4

CRN 110-16-7  
CMF C4 H4 O4

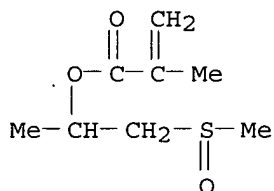
Double bond geometry as shown.



RN 185612-14-0 CAPLUS  
CN 11,14-Dioxo-2,9-diazaheptadec-16-enoic acid, 16-methyl-10,15-dioxo-,  
2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with  
2,2-dimethyl-1,3-propanediyl di-2-propenoate, 1-methyl-2-  
(methylsulfinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI)  
(CA INDEX NAME)

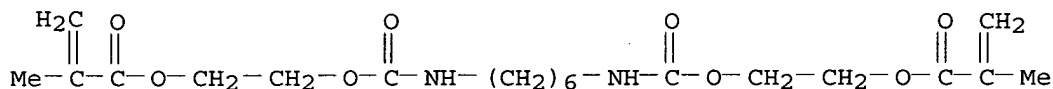
CM 1

CRN 185612-13-9  
CMF C8 H14 O3 S



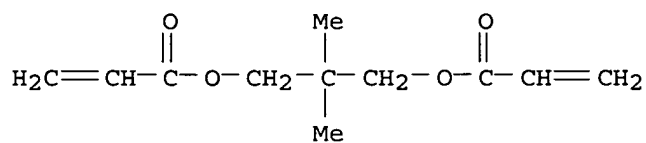
CM 2

CRN 34100-36-2  
CMF C20 H32 N2 O8



CM 3

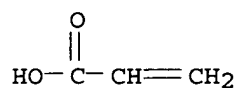
CRN 2223-82-7  
CMF C11 H16 O4



CM 4

CRN 79-10-7

CMF C3 H4 O2



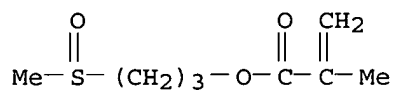
RN 185612-15-1 CAPLUS

CN 11,14-Dioxo-2,9-diazaheptadec-16-enoic acid, 16-methyl-10,15-dioxo-,  
2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with  
2,2-dimethyl-1,3-propanediyl di-2-propenoate, 3-(methylsulfinyl)propyl  
2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 146985-33-3

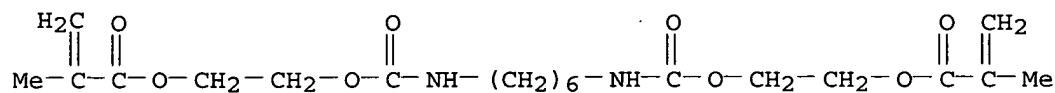
CMF C8 H14 O3 S



CM 2

CRN 34100-36-2

CMF C20 H32 N2 O8

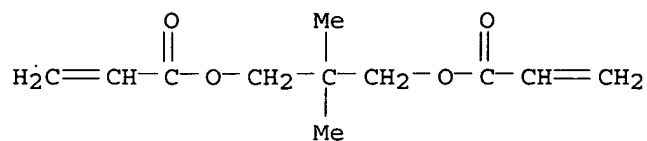


CM 3

CRN 2223-82-7

KOROMA EIC1700

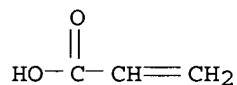
CMF C11 H16 O4



CM 4

CRN 79-10-7

CMF C3 H4 O2



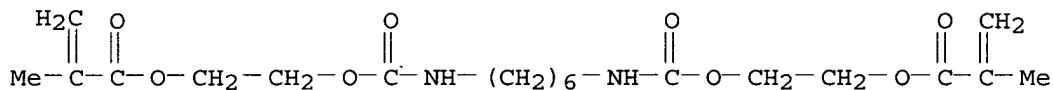
RN 185612-16-2 CAPLUS

CN 2-Butenedioic acid (2Z)-, polymer with 2,2-dimethyl-1,3-propanediyl di-2-propenoate, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 16-methyl-10,15-dioxo-11,14-dioxo-2,9-diazaheptadec-16-enoate, 2-(methylsulfinyl)ethyl 2-methyl-2-propenoate and 1,7,7-trimethylbicyclo[2.2.1]heptane-2,3-dione (9CI) (CA INDEX NAME)

CM 1

CRN 34100-36-2

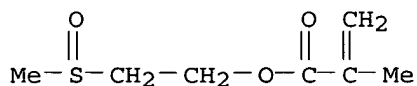
CMF C20 H32 N2 O8



CM 2

CRN 14794-09-3

CMF C7 H12 O3 S



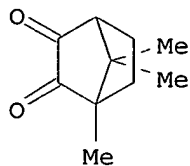
KOROMA EIC1700



CM 3

CRN 10373-78-1

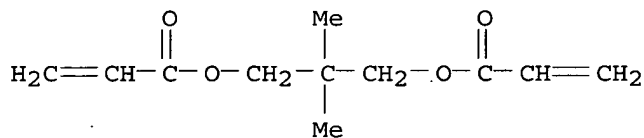
CMF C10 H14 O2



CM 4

CRN 2223-82-7

CMF C11 H16 O4

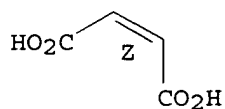


CM 5

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



RN 185612-18-4 CAPLUS

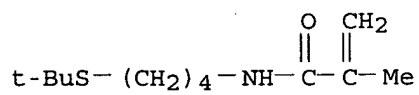
CN 2-Butenedioic acid (2Z)-, polymer with N-[4-[(1,1-dimethylethyl)thio]butyl]-2-methyl-2-propenamide, 2,2-dimethyl-1,3-propanediyl di-2-propenoate, (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bis(2-methyl-2-propenoate) and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 185612-17-3

KOROMA EIC1700

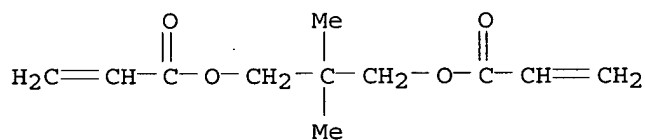
CMF C12 H23 N O S



CM 2

CRN 2223-82-7

CMF C11 H16 O4

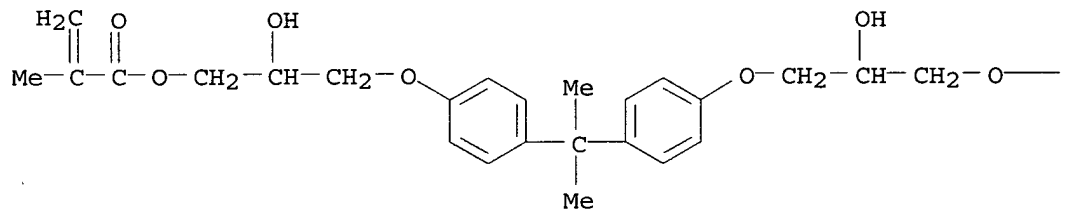


CM 3

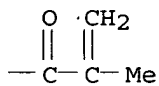
CRN 1565-94-2

CMF C29 H36 O8

PAGE 1-A



PAGE 1-B

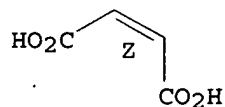


CM 4

CRN 110-16-7

CMF C4 H4 O4

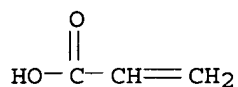
Double bond geometry as shown.



CM 5

CRN 79-10-7

CMF C3 H4 O2



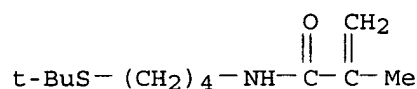
RN 185612-19-5 CAPLUS

CN 2-Butenedioic acid (2Z)-, polymer with N-[4-[(1,1-dimethylethyl)thio]butyl]-2-methyl-2-propenamide, 1,6-hexanediylbis[imino(2-methyl-3-oxo-3,1-propanediyl)] bis(2-methyl-2-propenoate), (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bis(2-methyl-2-propenoate) and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 185612-17-3

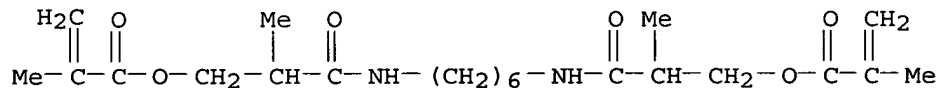
CMF C12 H23 N O S



CM 2

CRN 185612-11-7

CMF C22 H36 N2 O6



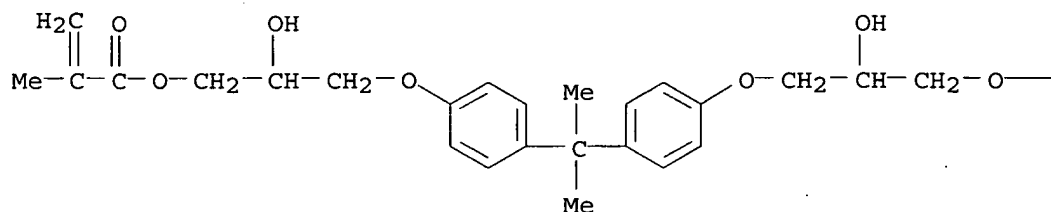
KOROMA EIC1700

CM 3

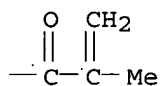
CRN 1565-94-2

CMF C29 H36 O8

PAGE 1-A



PAGE 1-B

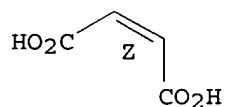


CM 4

CRN 110-16-7

CMF C4 H4 O4

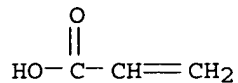
Double bond geometry as shown.



CM 5

CRN 79-10-7

CMF C3 H4 O2



RN 185612-20-8 CAPLUS

CN 11,14-Dioxa-2,9-diazaheptadec-16-enoic acid, 16-methyl-10,15-dioxo-,  
2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with

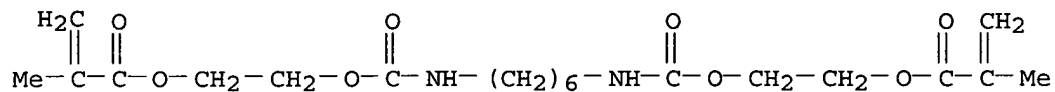
KOROMA EIC1700

2,2-dimethyl-1,3-propanediyl di-2-propenoate, 2-(methylsulfinyl)ethyl  
2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 34100-36-2

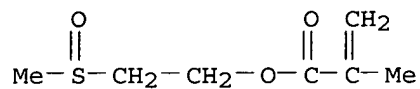
CMF C20 H32 N2 O8



CM 2

CRN 14794-09-3

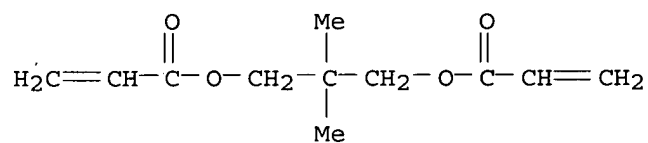
CMF C7 H12 O3 S



CM 3

CRN 2223-82-7

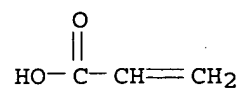
CMF C11 H16 O4



CM 4

CRN 79-10-7

CMF C3 H4 O2



IC ICM A61K006-08  
ICS A61K006-083; C08F299-02; C09J004-06  
CC 63-7 (Pharmaceuticals)  
Section cross-reference(s): 38  
ST dental cement compn polymer  
IT Dental materials and appliances  
(cements; dental cement compns.)  
IT Polymers, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(dental cement compns.)  
IT 505-10-2, 3-(Methylthio)propanol 5271-38-5, 2-(Methylthio)ethanol  
185612-21-9  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(dental cement compns.)  
IT 14794-09-3P 146985-33-3P 185612-17-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(dental cement compns.)  
IT 185612-09-3P 185612-10-6P 185612-12-8P  
185612-14-0P 185612-15-1P 185612-16-2P  
185612-18-4P 185612-19-5P 185612-20-8P  
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological  
study); PREP (Preparation); USES (Uses)  
(dental cement compns.)

L37 ANSWER 12 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:724153 CAPLUS

DOCUMENT NUMBER: 125:337183

TITLE: Process for, and use of, aqueous polymer dispersions  
for preserving mineral products, manufacture of the  
aqueous coating materials dispersions, and the aqueous  
polymer dispersions obtained

INVENTOR(S): Reck, Bernd; Franzmann, Gernot; Bechert, Bertold;  
Baecher, Reinhard; Rehmer, Gerd

PATENT ASSIGNEE(S): BASF A.-G., Germany

SOURCE: Ger. Offen., 23 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19514266	A1	19961017	DE 1995-19514266	19950415
WO 9633143	A1	19961024	WO 1996-EP1481	19960404
W: AU, BG, BR, CA, CN, CZ, HU, JP, KR, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9653993	A1	19961107	AU 1996-53993	19960404
EP 821660	A1	19980204	EP 1996-910954	19960404
R: AT, BE, CH, DE, DK, FR, GB, IT, LI, NL, SE, SI, FI				

KOROMA EIC1700

CN 1181750	A	19980513	CN 1996-193304	19960404
JP 11503710	T2	19990330	JP 1996-531445	19960404
US 6306460	B1	20011023	US 1997-930576	19971015
US 2002007005	A1	20020117	US 2001-910847	20010724
US 6569970	B2	20030527		

## PRIORITY APPLN. INFO.:

DE 1995-19514266	A	19950415
WO 1996-EP1481	W	19960404
US 1997-930576	A3	19971015

## OTHER SOURCE(S):

MARPAT 125:337183

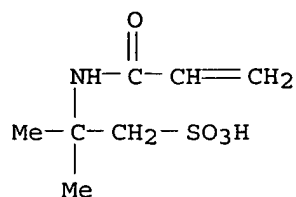
AB The process comprises coating the mineral products with an aq. dispersion of a polymer, in radically polycond. form, contg.  $\geq 1$  ethylenically unsatd. acids and/or their conjugated bases having general formula  $\text{CH}_2:\text{C}(\text{R}_1)\text{C}(\text{O})\text{XC}(\text{R}_2)(\text{R}_3)(\text{CH}_2)_n\text{SO}_3\text{-Y}^+(\text{I})$  [ $n = 0-2$ ; independently,  $\text{R}_1-3 = \text{H}$  or  $\text{Me}$ ;  $\text{X} = \text{H}$  or imino group ( $\text{NH}$ );  $\text{Y} = \text{H}$ , alkali metal, or  $\text{NH}_4$ ]. The aq. dispersions are manufd. by (1) providing a mixt. contg. 10-50 wt. of the total amt. of water to be used, 0-50 wt.% of the total amt. of dispersant to be used, and at least part of the monomers of type I, heating the mixt. to polymn. temp., (2) providing an emulsion contg. the balance of the monomers of type I, the balance of the other monomers, the balance of the dispersant, and 10-50 wt.% of the water to be used, (3) providing a soln. of the polymn. initiator in 10-20 wt.% of the water to be used, adding 1-10 wt.% (each) of the emulsion and the soln. to the heated mixt. and polymg.  $\geq 80\%$  of the monomers present, and adding the balance of the emulsion and the soln. Films obtained with the aq. polymer dispersions have glass transition temp.  $> 20$  to  $50^\circ\text{C}$ . and contain 90-95 wt.% of  $\geq 1$  monomers comprising esters of acrylic acid and methacrylic acid with  $\text{C}_{1-8}$ -alcs., styrene,  $\alpha$ -methylstyrene, o-chlorostyrene, and vinyltoluene, 0.5-5 wt.% of  $\geq 1$  monomers comprising acrylic acid, methacrylic acid, itaconic acid, their alkali metal and  $\text{NH}_4$  salts, acrylamide, and methacrylamide, and 0.5-5 wt.% of  $\geq 1$  monomers of type I. Extruded green concrete (sand-cement-water) products spray coated with the emulsions (polymer content 40, antifoaming agent content 5 wt.%) to  $120 \text{ g/m}^2$ , dried in a climate chamber at relative humidity 50% did not show any efflorescence.

IT 58374-69-9P 64112-34-1P 102931-58-8P  
 105732-26-1P 105732-27-2P 128584-02-1P  
 135600-67-8P 183793-84-2P 183793-85-3P  
 183793-86-4P 183793-89-7P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (efflorescence-resistant coating material; for concrete)

RN 58374-69-9 CAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monoammonium salt (9CI) (CA INDEX NAME)



● NH<sub>3</sub>

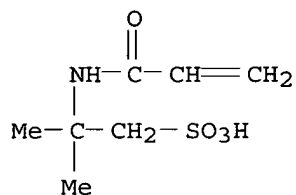
RN 64112-34-1 CAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene and  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA  
INDEX NAME)

CM 1

CRN 15214-89-8

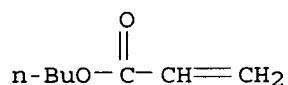
CMF C7 H13 N O4 S



CM 2

CRN 141-32-2

CMF C7 H12 O2



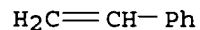
CM 3

CRN 100-42-5

CMF C8 H8







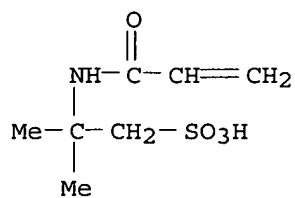
RN 102931-58-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

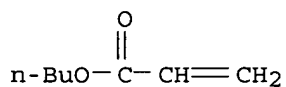


● Na

CM 2

CRN 141-32-2

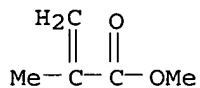
CMF C7 H12 O2



CM 3

CRN 80-62-6

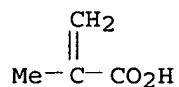
CMF C5 H8 O2



CM 4

CRN 79-41-4

CMF C4 H6 O2



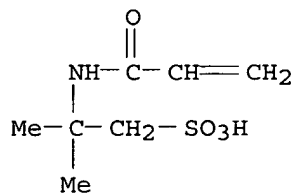
RN 105732-26-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

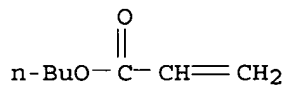
CMF C7 H13 N O4 S



CM 2

CRN 141-32-2

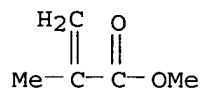
CMF C7 H12 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



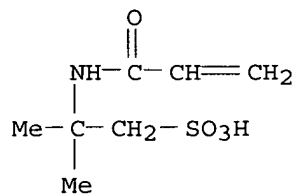
RN 105732-27-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

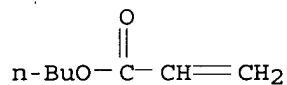
CMF C7 H13 N O4 S



CM 2

CRN 141-32-2

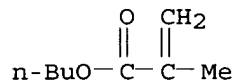
CMF C7 H12 O2



CM 3

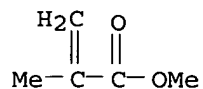
CRN 97-88-1

CMF C8 H14 O2



CM 4

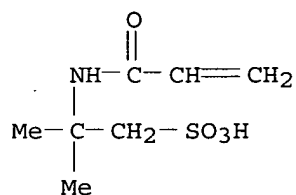
CRN 80-62-6  
CMF C5 H8 O2



RN 128584-02-1 CAPLUS  
CN 2-Propenoic acid, 2-ethylhexyl ester, polymer with ethenylbenzene and  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA  
INDEX NAME)

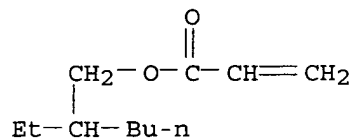
CM 1

CRN 15214-89-8  
CMF C7 H13 N O4 S



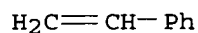
CM 2

CRN 103-11-7  
CMF C11 H20 O2



CM 3

CRN 100-42-5  
CMF C8 H8

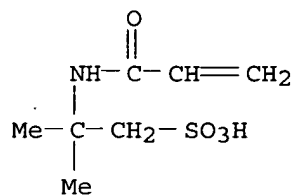


RN 135600-67-8 CAPLUS  
 CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene and  
 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium  
 salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

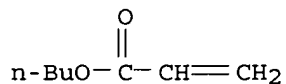


● Na

CM 2

CRN 141-32-2

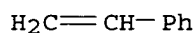
CMF C7 H12 O2



CM 3

CRN 100-42-5

CMF C8 H8



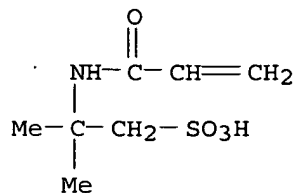
RN 183793-84-2 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl  
 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic  
 acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

KOROMA EIC1700

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

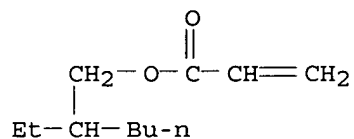


● Na

CM 2

CRN 103-11-7

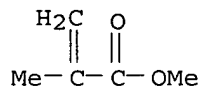
CMF C11 H20 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



RN 183793-85-3 CAPLUS

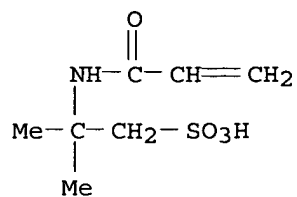
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

KOROMA EIC1700

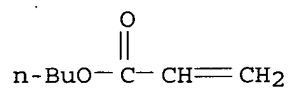


● Na

CM 2

CRN 141-32-2

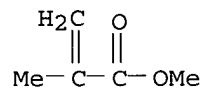
CMF C7 H12 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



RN 183793-86-4 CAPLUS

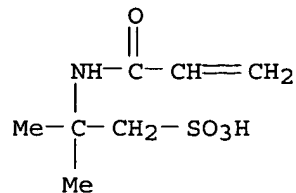
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl  
2-propenoate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid  
and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

CMF C7 H13 N O4 S

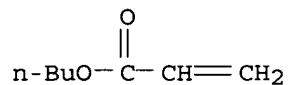




CM 2

CRN 141-32-2

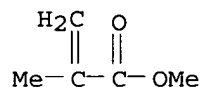
CMF C7 H12 O2



CM 3

CRN 80-62-6

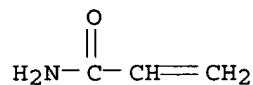
CMF C5 H8 O2



CM 4

CRN 79-06-1

CMF C3 H5 N O



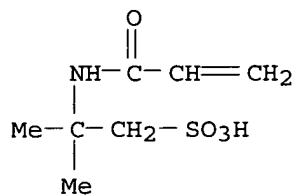
RN 183793-89-7 CAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenyl acetate,  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and  
2-propenamide (9CI) (CA INDEX NAME)

CM 1

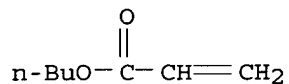
KOROMA EIC1700

CRN 15214-89-8  
CMF C7 H13 N O4 S



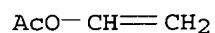
CM 2

CRN 141-32-2  
CMF C7 H12 O2



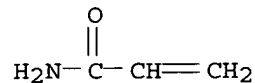
CM 3

CRN 108-05-4  
CMF C4 H6 O2



CM 4

CRN 79-06-1  
CMF C3 H5 N O



IC ICM C04B041-63  
ICS C04B041-83; C09D133-14; C09D133-24  
ICA C08F002-24; C08F212-08; C08F220-12; C08F236-04; C08F214-06; C08F214-08;  
C08F218-04; C08F210-02; C08F220-04; C08F222-02  
ICI C08F246-00, C08F220-38, C08F220-58  
CC 58-2 (Cement, Concrete, and Related Building Materials)

KOROMA EIC1700

Section cross-reference(s): 42

- ST coating material efflorescence resistant; aq polymer dispersion  
**concrete** coating; acrylic acid ester polymer dispersion;  
methacrylic acid ester polymer dispersion; styrene ester polymer  
dispersion; methylstyrene ester polymer dispersion; chlorostyrene ester  
polymer dispersion; vinyltoluene ester polymer dispersion; dispersant  
polymer dispersion
- IT Ketones, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(C13-15, hydroxy, ethoxylated, esters, dispersants; **compns.**  
for aq. polymer dispersions for efflorescence-resistant coating  
formation on **concrete**)
- IT **Concrete**  
(aq. polymer dispersions for efflorescence-resistant coating formation  
on)
- IT Dispersing agents  
(**compns.** for aq. polymer dispersions for efflorescence-  
resistant coating formation on **concrete**)
- IT Coating materials  
(efflorescence-resistant, for **concrete**)
- IT 7775-27-1, Sodium peroxydisulfate  
RL: CAT (Catalyst use); USES (Uses)  
(**compns.** for aq. polymer dispersions for efflorescence-  
resistant coating formation on **concrete**)
- IT 9081-17-8  
RL: MOA (Modifier or additive use); USES (Uses)  
(dispersant; **compns.** for aq. polymer dispersions for  
efflorescence-resistant coating formation on **concrete**)
- IT 25852-91-9D, ethers with C13-15-oxo-alcs.  
RL: MOA (Modifier or additive use); USES (Uses)  
(dispersants; **compns.** for aq. polymer dispersions for  
efflorescence-resistant coating formation on **concrete**)
- IT 28575-53-3P 31165-18-1P 35061-69-9P 52556-35-1P **58374-69-9P**  
**64112-34-1P 102931-58-8P 105732-26-1P**  
**105732-27-2P 128584-02-1P 135600-67-8P**  
**183793-84-2P 183793-85-3P 183793-86-4P**  
**183793-89-7P 183793-91-1P 183793-93-3P 183793-95-5P**  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)  
(efflorescence-resistant coating material; for **concrete**)
- IT 7582-21-0DP, 2-Propenoic acid, 2-methyl-, 3-sulfopropyl ester, alkali  
metal salts 10595-80-9DP, alkali metal salts 15214-89-8DP, alkali  
metal salts 39121-78-3DP, 2-Propenoic acid, 3-sulfopropyl ester, alkali  
metal salts  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)  
(efflorescence-resistant coating materials; for **concrete**)

L37 ANSWER 13 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:307602 CAPLUS

DOCUMENT NUMBER: 124:345510

TITLE: Grout materials for mechanical cable coatings

INVENTOR(S): Morita, Hiroshi; Ito, Tokuji; Notoya, Kyoichi  
 PATENT ASSIGNEE(S): Lion Corp, Japan; Nippon Kasei Chem  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08041269	A2	19960213	JP 1994-195910	19940728
JP 2627253	B2	19970702		

PRIORITY APPLN. INFO.: JP 1994-195910 19940728

AB Title materials with good flowability and processability, useful for gap-filling of cables, comprise (a) acrylic micropolymer emulsions with av. particle size 30-200 nm prepd. by emulsion polymn. of .gtoreq.1 unsatd. monomers having carboxylic acid (salts) and/or sulfonic acid (salts) and (meth)acrylic acid esters and (b) water-curable **compns**. Thus, portland **cement** and acrylic emulsion comprising core prepd. from Bu acrylate (I) 79.0, Me methacrylate (II) 20.0, and trimethylolpropane methacrylate (III) 1.0 parts and shell prepd. from I 18.5, methacrylic acid 3.0, II 73.0, III 1.8, 2-acrylamide-2-methylpropanesulfonic acid 1.8, and N-methylolacrylamide 1.8 parts were mixed to give a test piece showing good flowability and tensile strength 69 kg/cm<sup>2</sup>.

IT 165122-49-6P, 2-Acrylamido-2-methylpropanesulfonic acid-butyl acrylate-methacrylic acid-methyl methacrylate-N-methylolacrylamide-trimethylolpropane methacrylate copolymer 165122-50-9P, 2-Acrylamido-2-methylpropanesulfonic acid-butyl acrylate-ethyl acrylate-methacrylic acid-methyl methacrylate-N-methylolacrylamide-trimethylolpropane methacrylate copolymer  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (acrylic emulsions for cable coatings contg. water curable **compns.** with good flowability and moldability)

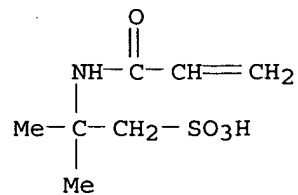
RN 165122-49-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol 2-methyl-2-propenoate, N-(hydroxymethyl)-2-propenamide, methyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

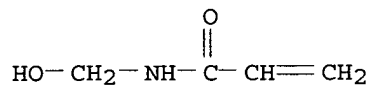
CMF C7 H13 N O4 S



CM 2

CRN 924-42-5

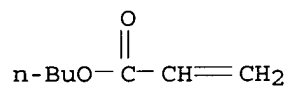
CMF C4 H7 N O2



CM 3

CRN 141-32-2

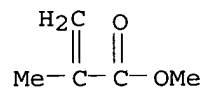
CMF C7 H12 O2



CM 4

CRN 80-62-6

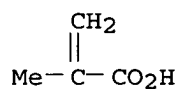
CMF C5 H8 O2



CM 5

CRN 79-41-4

CMF C4 H6 O2



CM 6

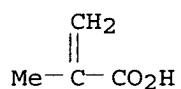
CRN 39347-37-0

CMF C6 H14 O3 . x C4 H6 O2

CM 7

CRN 79-41-4

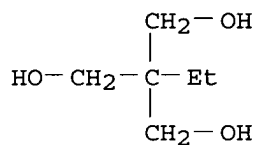
CMF C4 H6 O2



CM 8

CRN 77-99-6

CMF C6 H14 O3



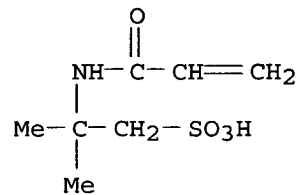
RN 165122-50-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol 2-methyl-2-propenoate, ethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, methyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

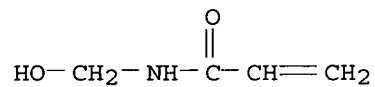
CMF C7 H13 N O4 S



CM 2

CRN 924-42-5

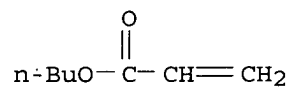
CMF C4 H7 N O2



CM 3

CRN 141-32-2

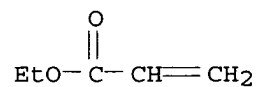
CMF C7 H12 O2



CM 4

CRN 140-88-5

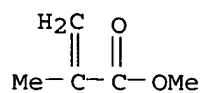
CMF C5 H8 O2



CM 5

CRN 80-62-6

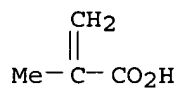
CMF C5 H8 O2



CM 6

CRN 79-41-4

CMF C4 H6 O2



CM 7

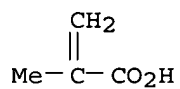
CRN 39347-37-0

CMF C6 H14 O3 . x C4 H6 O2

CM 8

CRN 79-41-4

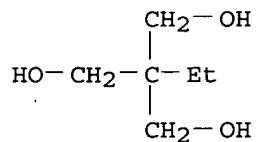
CMF C4 H6 O2



CM 9

CRN 77-99-6

CMF C6 H14 O3



IC ICM C08L033-00

ICS C08L033-06; C09D133-06; D07B001-16; E04G021-12

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 42

KOROMA EIC1700



ST cable coating grout material emulsion; carboxylic acid salt methacrylate emulsion; sulfonic acid salt acrylic micropolymer; water curable **cement** emulsion coating

IT Cables, mechanical  
(acrylic emulsions for cable coatings contg. water curable **compns.** with good flowability and moldability)

IT Coating materials  
(grout; acrylic emulsions for cable coatings contg. water curable **compns.** with good flowability and moldability)

IT **Cement**  
(portland, acrylic emulsions for cable coatings contg. water curable **compns.** with good flowability and moldability)

IT 164978-74-9P, Butyl acrylate-methyl methacrylate-trimethylolpropane methacrylate copolymer **165122-49-6P**, 2-Acrylamido-2-methylpropanesulfonic acid-butyl acrylate-methacrylic acid-methyl methacrylate-N-methylolacrylamide-trimethylolpropane methacrylate copolymer **165122-50-9P**, 2-Acrylamido-2-methylpropanesulfonic acid-butyl acrylate-ethyl acrylate-methacrylic acid-methyl methacrylate-N-methylolacrylamide-trimethylolpropane methacrylate copolymer  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(acrylic emulsions for cable coatings contg. water curable **compns.** with good flowability and moldability)

L37 ANSWER 14 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:680718 CAPLUS

DOCUMENT NUMBER: 123:64048

TITLE: **Compositions** of precast **cement** mixtures for construction

INVENTOR(S): Yamaguchi, Susumu; Takebishi, Kunio; Ito, Tokuji; Morita, Hiroshi

PATENT ASSIGNEE(S): Lion Corp, Japan; Odakyu Kensetsu Kk

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07048161	A2	19950221	JP 1993-200062	19930719
JP 2585959	B2	19970226		

PRIORITY APPLN. INFO.: JP 1993-200062 19930719

AB The mixts. contains an inorg. hydraulic material 100, siliceous additives 3-12, micro polymer emulsion having av. particle diam 20-1000 nm 0.5-5 (solid base), fine aggregates 80-220, arom. aminosulfonate water reducing agent 0.25-1.8 (solid base), pigment 0-5, and water 25-35 wt. parts. The polymer is preferably an acrylic polymer, which may be crosslinked.

IT **165122-49-6 165122-50-9**

RL: TEM (Technical or engineered material use); USES (Uses)

(comps. of precast cement mixts. for construction)

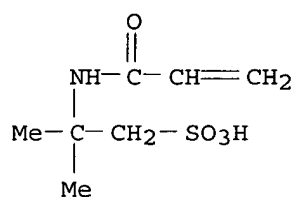
RN 165122-49-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol 2-methyl-2-propenoate, N-(hydroxymethyl)-2-propenamide, methyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

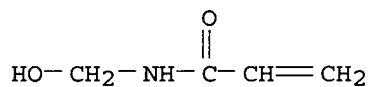
CMF C7 H13 N O4 S



CM 2

CRN 924-42-5

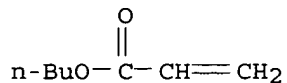
CMF C4 H7 N O2



CM 3

CRN 141-32-2

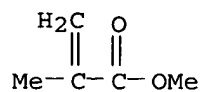
CMF C7 H12 O2



CM 4

CRN 80-62-6

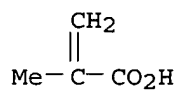
CMF C5 H8 O2



CM 5

CRN 79-41-4

CMF C4 H6 O2



CM 6

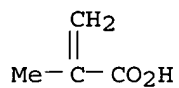
CRN 39347-37-0

CMF C6 H14 O3 . x C4 H6 O2

CM 7

CRN 79-41-4

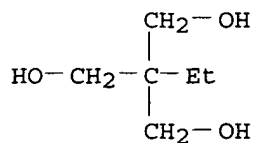
CMF C4 H6 O2



CM 8

CRN 77-99-6

CMF C6 H14 O3



RN 165122-50-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,  
2-ethyl-2-(hydroxymethyl)-1,3-propanediol 2-methyl-2-propenoate, ethyl

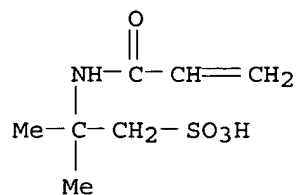
KOROMA EIC1700

2-propenoate, N-(hydroxymethyl)-2-propenamide, methyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

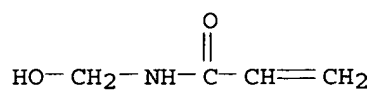
CMF C7 H13 N O4 S



CM 2

CRN 924-42-5

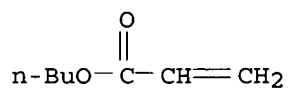
CMF C4 H7 N O2



CM 3

CRN 141-32-2

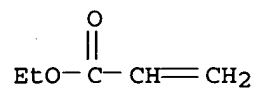
CMF C7 H12 O2



CM 4

CRN 140-88-5

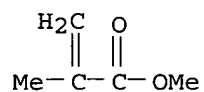
CMF C5 H8 O2



CM 5

CRN 80-62-6

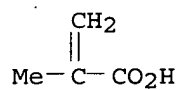
CMF C5 H8 O2



CM 6

CRN 79-41-4

CMF C4 H6 O2



CM 7

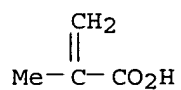
CRN 39347-37-0

CMF C6 H14 O3 . x C4 H6 O2

CM 8

CRN 79-41-4

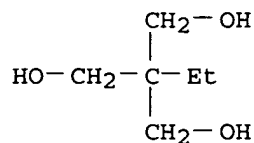
CMF C4 H6 O2



CM 9

CRN 77-99-6

CMF C6 H14 O3



IC ICM C04B028-04  
 ICS C04B024-22; C04B024-26; E04C002-04  
 ICI C04B028-04, C04B022-06, C04B024-26, C04B024-22, C04B111-27  
 CC 58-4 (Cement, Concrete, and Related Building Materials)  
 ST precast **cement** acrylic polymer emulsion  
 IT Building materials  
     **Cement**  
     (compns. of precast **cement** mixts. for construction)  
 IT Sulfonic acids, uses  
     RL: TEM (Technical or engineered material use); USES (Uses)  
     (sodium salts, **compns.** of precast **cement** mixts. for  
     construction)  
 IT 1337-33-3, Stearyl citrate 7757-82-6, Sulfuric acid disodium salt, uses  
     164978-74-9 165122-49-6 165122-50-9  
     RL: TEM (Technical or engineered material use); USES (Uses)  
     (**compns.** of precast **cement** mixts. for construction)  
 IT 79-10-7, 2-Propenoic acid, uses  
     RL: TEM (Technical or engineered material use); USES (Uses)  
     (esters; **compns.** of precast **cement** mixts. for  
     construction)  
 IT 7631-86-9, Silica, uses  
     RL: TEM (Technical or engineered material use); USES (Uses)  
     (fume; **compns.** of precast **cement** mixts. for  
     construction)  
 IT 9016-45-9  
     RL: TEM (Technical or engineered material use); USES (Uses)  
     (surfactants; **compns.** of precast **cement** mixts. for  
     construction)

L37 ANSWER 15 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1995:374880 CAPLUS  
 DOCUMENT NUMBER: 122:140796  
 TITLE: Setting retardant for **cement**-containing  
     mixes  
 INVENTOR(S): Rodrigues, Klein A.  
 PATENT ASSIGNEE(S): Halliburton Co., USA  
 SOURCE: Eur. Pat. Appl., 18 pp.  
     CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 633390	A1	19950111	EP 1994-304841	19940701
EP 633390	B1	19990915		
R: DE, FR, GB, IT, NL				
NO 9402497	A	19950102	NO 1994-2497	19940701
CA 2127346	AA	19950102	CA 1994-2127346	19940704
CA 2127346	C	20030513		
US 5536311	A	19960716	US 1995-510293	19950802
PRIORITY APPLN. INFO.:			US 1993-86403	A 19930701
			US 1992-955604	B2 19921002
			US 1994-289834	B1 19940812

AB A setting retardant for a hydraulic cement compn. comprises a polymer formed from two or three different monomers. The 1st monomer is a compd. of formula (R1)R2C:CR3(R4) wherein R1 is a H or CH3; R2 is H or COOH; R3 is H or COOH; and R4 is H, COOH or CH2COOH; provided that when R1 is H and R2 is COOH, R3 and R4 are different and are either H or COOH; when R1 and R2 are both H, R3 is COOH and R4 is CH2COOH; and when R1 is CH3, R2 is COOH and R3 and R4 are different and are either H or COOH; the 2nd monomer-forming compd. is 2-acrylamido-2-methylpropane sulfonic acid, sodium methylsulfonyl sulfonate, sodium p-vinyl benzene sulfonate, acrylamide, N,N-dimethylacrylamide, vinyl sulfonic acid, acrylonitrile, 1-vinyl-2-pyrrolidone, vinyl phosphonic acid, diallyldimethylammonium chloride, diethylaminoethyl methacrylate, dimethylaminoethyl acrylate Me chloride, methacrylamido propyltrimethyl ammonium chloride, N,N-dimethylaminoethyl methacrylate, or 2-triethylammoniummethyl methacrylate chloride; and the 3rd monomer-forming compds.

IT 69952-29-0P 79996-03-5P 106173-71-1P  
115426-14-7P 115426-15-8P 161122-59-4P  
RL: MOA (Modifier or additive use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)  
(setting retardant for cement-contg. mixes)

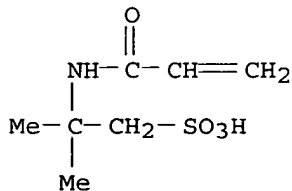
RN 69952-29-0 CAPLUS

CN 2-Butenedioic acid (2Z)-, polymer with ethenyl acetate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

CMF C7 H13 N O4 S

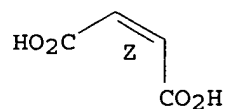


CM 2

CRN 110-16-7

CMF C4 H4 O4

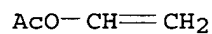
Double bond geometry as shown.



CM 3

CRN 108-05-4

CMF C4 H6 O2



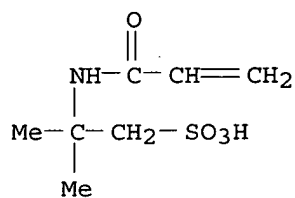
RN 79996-03-5 CAPLUS

CN 2-Butenedioic acid (2Z)-, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

CMF C7 H13 N O4 S



CM 2

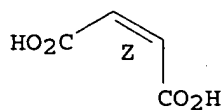
CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.

KOROMA EIC1700

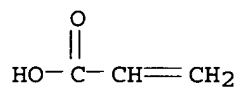




CM 3

CRN 79-10-7

CMF C3 H4 O2



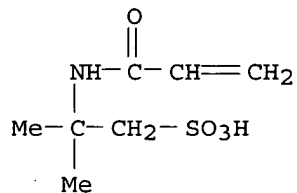
RN 106173-71-1 CAPLUS

CN Butanedioic acid, methylene-, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

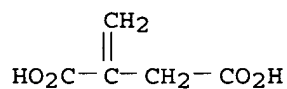
CMF C7 H13 N O4 S



CM 2

CRN 97-65-4

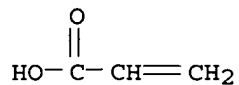
CMF C5 H6 O4



CM 3

KOROMA EIC1700

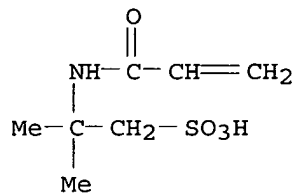
CRN 79-10-7  
CMF C3 H4 O2



RN 115426-14-7 CAPLUS  
CN Butanedioic acid, methylene-, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-propenamide (9CI) (CA INDEX NAME)

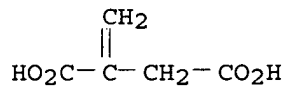
CM 1

CRN 15214-89-8  
CMF C7 H13 N O4 S



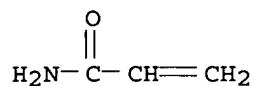
CM 2

CRN 97-65-4  
CMF C5 H6 O4



CM 3

CRN 79-06-1  
CMF C3 H5 N O



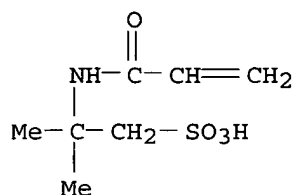
RN 115426-15-8 CAPLUS

CN 2-Butenedioic acid (2Z)-, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

CMF C7 H13 N O4 S

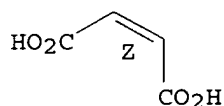


CM 2

CRN 110-16-7

CMF C4 H4 O4

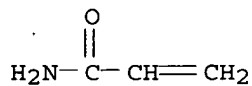
Double bond geometry as shown.



CM 3

CRN 79-06-1

CMF C3 H5 N O



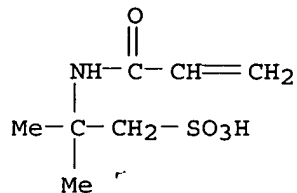
RN 161122-59-4 CAPLUS

CN Butanedioic acid, methylene-, polymer with ethenyl acetate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

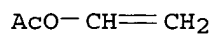
KOROMA EIC1700

CRN 15214-89-8  
CMF C7 H13 N O4 S



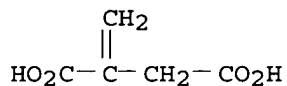
CM 2

CRN 108-05-4  
CMF C4 H6 O2



CM 3

CRN 97-65-4  
CMF C5 H6 O4



IC ICM E21B033-13  
ICS C04B024-26; C04B024-16  
CC 58-2 (Cement, Concrete, and Related Building Materials)  
ST polymeric setting retardant **cement** mix  
IT **Cement**  
(polymeric setting retardant for **cement**-contg. mixes)  
IT **Concrete**  
(polymeric setting retardant for **concrete** mixes)  
IT Mortar  
(polymeric setting retardant for mortar mixes)  
IT 69952-29-0P 79996-03-5P 106173-71-1P  
115426-14-7P 115426-15-8P 161122-59-4P  
RL: MOA (Modifier or additive use); PNU (Preparation, unclassified); PREP  
(Preparation); USES (Uses)  
(setting retardant for **cement**-contg. mixes)

L37 ANSWER 16 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

KOROMA EIC1700

ACCESSION NUMBER: 1995:95346 CAPLUS  
DOCUMENT NUMBER: 122:33292  
TITLE: Soil injection agents and injection process  
INVENTOR(S): Iijima, Shigeru; Shimomura, Tadaaki  
PATENT ASSIGNEE(S): Dai Ichi Kogyo Seiyaku Co Ltd, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06184535	A2	19940705	JP 1992-275230	19920917

PRIORITY APPLN. INFO.: JP 1992-275230 19920917

AB The injection agents contain acrylic polymers with intrinsic viscosity (.eta.) 0.1-2.0 dL/g and optionally org. dispersing agents and are blended as builders with inorg. soil-stabilizing agents and injected into ground. Thus, an aq. mixt. of cement 450, bentonite 50, and polymethacrylamide (.eta. 0.55) 0.9 part showed bleeding (JSCE-1986) 2.0% after 20 h and viscosity (JSCE-1986) 10.0 s initially, 11.2 after 1 h, and 16.6 after 2 h.

IT 38193-60-1 53845-61-7 87431-09-2  
RL: MOA (Modifier or additive use); USES (Uses)  
(soil stabilization agents contg. acrylic polymers with improved bleeding resistance)

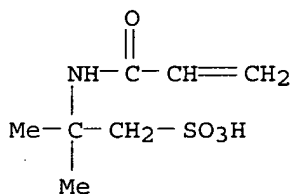
RN 38193-60-1 CAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

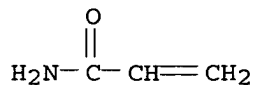
CMF C7 H13 N O4 S . Na



● Na

CM 2

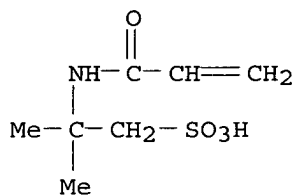
CRN 79-06-1  
CMF C3 H5 N O



RN 53845-61-7 CAPLUS  
CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with 2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

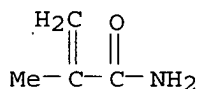
CRN 5165-97-9  
CMF C7 H13 N O4 S . Na



● Na

CM 2

CRN 79-39-0  
CMF C4 H7 N O

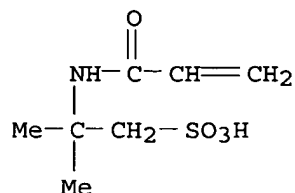


RN 87431-09-2 CAPLUS  
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9  
CMF C7 H13 N O4 S . Na

KOROMA EIC1700

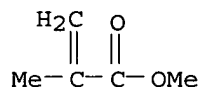


● Na

CM 2

CRN 80-62-6

CMF C5 H8 O2



IC ICM C09K017-00

ICS E02D003-12

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 58

ST **cement** builder acrylic polymer antibleeding; polymethacrylamide  
**cement** soil stabilization

IT Clays, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(SAM; soil stabilization agents contg. acrylic polymers with improved  
bleeding resistance)

IT **Cement**

Soil stabilization

(soil stabilization agents contg. acrylic polymers with improved  
bleeding resistance)

IT Bentonite, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(soil stabilization agents contg. acrylic polymers with improved  
bleeding resistance)

IT 8061-51-6, Sodium ligninsulfonate 9084-06-4, Formaldehyde-  
naphthalenesulfonic acid copolymer sodium salt 64787-97-9

RL: MOA (Modifier or additive use); USES (Uses)

(dispersants; soil stabilization agents contg. acrylic polymers with  
improved bleeding resistance)

IT 9003-05-8, Polyacrylamide 24991-37-5, Acrylamide-sodium methacrylate  
copolymer 25014-12-4, Polymethacrylamide 25085-02-3, Acrylamide-sodium  
acrylate copolymer 27924-64-7, Acrylamide-methyl acrylate copolymer

KOROMA EIC1700

28599-85-1, Methyl acrylate-sodium acrylate copolymer 30425-01-5  
 37100-07-5 38193-60-1 51032-63-4, Methyl methacrylate-sodium  
 acrylate copolymer 53845-61-7 87431-09-2 159830-56-5  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (soil stabilization agents contg. acrylic polymers with improved  
 bleeding resistance)

L37 ANSWER 17 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1994:658007 CAPLUS  
 DOCUMENT NUMBER: 121:258007  
 TITLE: Aqueous polymer dispersions and their use with  
 hydraulic binders  
 INVENTOR(S): Albrecht, Gerhard; Leitner, Hubert; Werenka, Christian  
 PATENT ASSIGNEE(S): Chemie Linz (Deutschland) GmbH, Germany  
 SOURCE: Ger. Offen., 8 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4235643	A1	19940428	DE 1992-4235643	19921022
PRIORITY APPLN. INFO.:			DE 1992-4235643	19921022

AB Aq. dispersions of copolymers of .gtoreq.1 ester of an  
 .alpha.,.beta.-unsatd. carboxylic acid and a C1-12 alc. 70-98, an  
 N-substituted cyclic imide of an .alpha.,.beta.-unsatd. dicarboxylic acid  
 0.05-15, an .alpha.,.beta.-unsatd. carboxylic acid 0.05-15, and other  
 monomers 0-28% are prepd. and used with hydraulic binders in the prepn. of  
 coatings showing low water absorption and good weather resistance. A  
 dispersion was prepd. by emulsion polymn. of 2-ethylhexyl acrylate 95.26,  
 N-phenylmaleimide 2.5, methacrylic acid 2.0, triethylene glycol  
 dimethacrylate 0.12, and 2-acrylamido-2-methyl-1-propanesulfonic acid 0.12  
 part and used with cement in a coating compn. for  
 concrete, etc.

IT 158349-11-2P 158349-12-3P  
 RL: PREP (Preparation)  
 (prepn. of, in aq. dispersion, for use with hydraulic binders)

RN 158349-11-2 CAPLUS

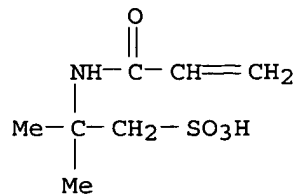
CN 2-Propenoic acid, 2-methyl-, polymer with 1,2-ethanediylbis(oxy-2,1-  
 ethanediyl) bis(2-methyl-2-propenoate), 2-ethylhexyl 2-propenoate,  
 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and  
 1-phenyl-1H-pyrrole-2,5-dione (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

CMF C7 H13 N O4 S

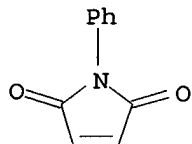




CM 2

CRN 941-69-5

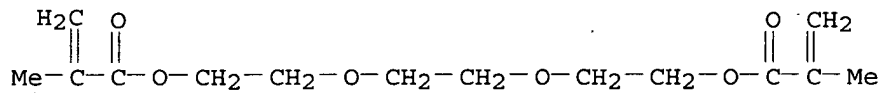
CMF C10 H7 N O2



CM 3

CRN 109-16-0

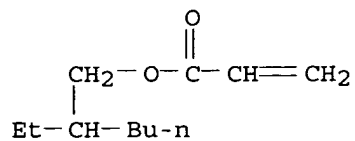
CMF C14 H22 O6



CM 4

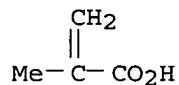
CRN 103-11-7

CMF C11 H20 O2



CM 5

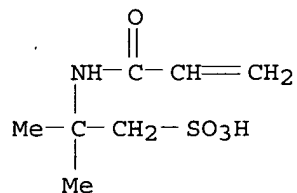
CRN 79-41-4  
CMF C4 H6 O2



RN 158349-12-3 CAPLUS  
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,  
1,2-ethanediylbis(oxy-2,1-ethanediyl) bis(2-methyl-2-propenoate),  
2-ethylhexyl 2-propenoate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-  
propanesulfonic acid and 1-phenyl-1H-pyrrole-2,5-dione (9CI) (CA INDEX  
NAME)

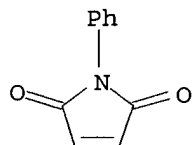
CM 1

CRN 15214-89-8  
CMF C7 H13 N O4 S



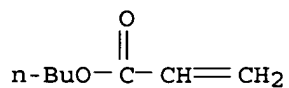
CM 2

CRN 941-69-5  
CMF C10 H7 N O2



CM 3

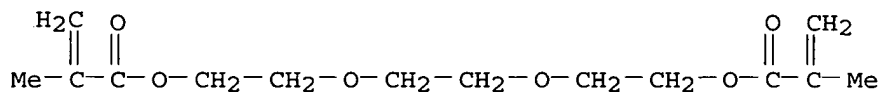
CRN 141-32-2  
CMF C7 H12 O2



CM 4

CRN 109-16-0

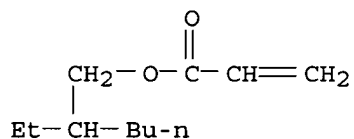
CMF C14 H22 O6



CM 5

CRN 103-11-7

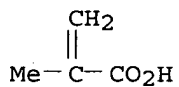
CMF C11 H20 O2



CM 6

CRN 79-41-4

CMF C4 H6 O2



IC ICM C08F220-12

ICS C08F222-14; C08F222-40; C08F220-04; C08F222-02; C08F002-22;  
C04B028-04; C04B024-28

ICI C08F220-12, C08F222-40, C08F220-04, C08F222-02, C08F220-38, C08F228-02,  
C08F212-00, C08F214-06, C08F218-04, C08F220-20, C08F220-26, C08F220-32

CC 42-7 (Coatings, Inks, and Related Products)

Section cross-reference(s): 58

ST ethylhexyl acrylate copolymer dispersion coating; maleimide phenyl

KOROMA EIC1700

copolymer dispersion coating; acrylamidomethylpropanesulfonic copolymer dispersion coating; acrylic copolymer dispersion **cement** coating; water resistance coating acrylic **cement**; weather resistance coating acrylic **cement**; carboxy acrylic polymer dispersion coating; sulfonic acrylic polymer dispersion coating

IT **Cement**

(coatings from acrylic polymer dispersions and, water- and weather-resistant)

IT Coating materials

(water- and weather-resistant, aq. acrylic polymer dispersions contg. hydraulic binders for)

IT 158349-11-2P 158349-12-3P 158349-13-4P

RL: PREP (Preparation)

(prepn. of, in aq. dispersion, for use with hydraulic binders)

L37 ANSWER 18 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1994:633159 CAPLUS

DOCUMENT NUMBER: 121:233159

TITLE: Polymers and polymer dispersions and their use in hydraulic binders

INVENTOR(S): Albrecht, Gerhard Dr; Leitner, Hubert; Werenka, Christian

PATENT ASSIGNEE(S): Chemie Linz Gesellschaft m.b.h., Austria

SOURCE: Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 589256	A1	19940330	EP 1993-114032	19930902
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, PT, SE				
HU 66270	A2	19941128	HU 1993-2714	19930924
PRIORITY APPLN. INFO.:			AT 1992-1906	19920925

AB Copolymers of unsatd. carboxylic acids, carboxylate esters, sulfonic acids, and cyclic imides are prepd. and used in **cement**-contg. **compns.** for the prepn. of coatings (e.g., on **concrete** and renovated buildings) showing low water absorption and good flexibility and toughness. A copolymer of methacrylic acid 25.7, 2-acrylamido-2,2-dimethylethanesulfonic acid 1.6, N-phenylmaleimide 32.1, triethylene glycol dimethacrylate 1.6, and 2-ethylhexyl acrylate 1223.4 g was prepd. and used with portland **cement** in a **compn.** which gave weather-resistant coatings.

IT 158349-11-2P 158349-12-3P

RL: PREP (Preparation)

(prepn. and use with **cement** in weather-resistant coatings)

RN 158349-11-2 CAPLUS

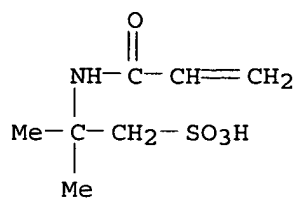
CN 2-Propenoic acid, 2-methyl-, polymer with 1,2-ethanediylbis(oxy-2,1-ethanediyl) bis(2-methyl-2-propenoate), 2-ethylhexyl 2-propenoate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and

1-phenyl-1H-pyrrole-2,5-dione (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

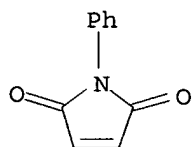
CMF C7 H13 N O4 S



CM 2

CRN 941-69-5

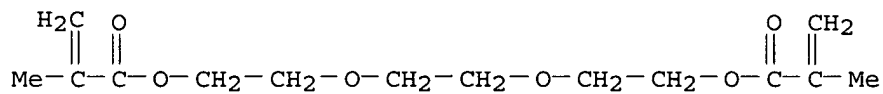
CMF C10 H7 N O2



CM 3

CRN 109-16-0

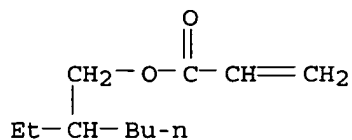
CMF C14 H22 O6



CM 4

CRN 103-11-7

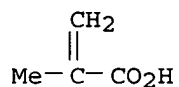
CMF C11 H20 O2



CM 5

CRN 79-41-4

CMF C4 H6 O2



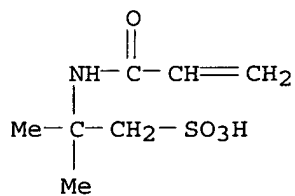
RN 158349-12-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 1,2-ethanediylbis(oxy-2,1-ethanediyl) bis(2-methyl-2-propenoate), 2-ethylhexyl 2-propenoate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 1-phenyl-1H-pyrrole-2,5-dione (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

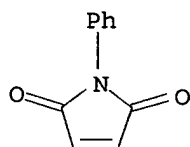
CMF C7 H13 N O4 S



CM 2

CRN 941-69-5

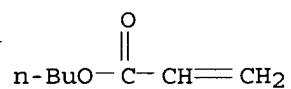
CMF C10 H7 N O2



CM 3

CRN 141-32-2

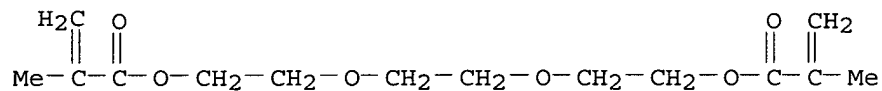
CMF C7 H12 O2



CM 4

CRN 109-16-0

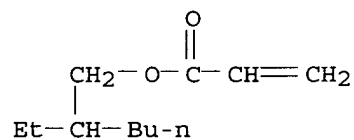
CMF C14 H22 O6



CM 5

CRN 103-11-7

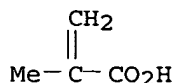
CMF C11 H20 O2



CM 6

CRN 79-41-4

CMF C4 H6 O2



IC ICM C08F220-12  
ICS C04B024-26  
CC 42-10 (Coatings, Inks, and Related Products)  
ST carboxy polymer **cement** coating; sulfonic acid polymer **cement** coating; maleimide copolymer **cement** coating; ethylhexyl acrylate copolymer **cement** coating; water resistance coating polymer **cement**; weather resistance coating polymer **cement**; flexibility coating polymer **cement**; concrete coating polymer **cement**  
IT **Cement**  
(coatings, contg. polymers with carboxy, sulfo, and imide groups, weather-resistant)  
IT Carboxylic acids, preparation  
Imides  
Sulfonic acids, preparation  
RL: PREP (Preparation)  
(polymers, prepn. and use with **cement** in weather-resistant coatings)  
IT Coating materials  
(weather-resistant, **cement** and polymers contg. carboxy, sulfo, and imide groups for)  
IT 158349-11-2P 158349-12-3P 158349-13-4P  
RL: PREP (Preparation)  
(prepn. and use with **cement** in weather-resistant coatings)

L37 ANSWER 19 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1994:142393 CAPLUS  
DOCUMENT NUMBER: 120:142393  
TITLE: Artificial stone **compositions** for high-gloss products resistant to chemicals, water, and weathering  
INVENTOR(S): Yamaguchi, Susumu; Takabe, Takahiro; Ito, Tokuji; Kobayashi, Naoki; Morita, Hiroshi  
PATENT ASSIGNEE(S): Lion Corp, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05254906	A2	19931005	JP 1992-89376	19920313
PRIORITY APPLN. INFO.:			JP 1992-89376	19920313
AB The title <b>compns.</b> contain (a) hydraulic inorg. material, (b) SiO <sub>2</sub> -based admixt., preferably fly ash having av. particle size 1-20				



.mu.m, (c) water-dispersible acrylic polymer, preferably ultrafine granular polymer having av. particle size 50-2000 nm, prep'd. by emulsion polymn., (d) fine aggregate, and (d) pigment at (a)/(b)/(c)/(d)/(e) wt. ratio = (10-50)/(1-50)/(1-30)(0-70)/(0-50).

IT 153344-68-4 153344-70-8

RL: TEM (Technical or engineered material use); USES (Uses)  
(artificial stone compns. contg., mortar-based, for water and acid resistance)

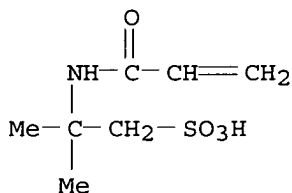
RN 153344-68-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl bis(2-methyl-2-propenoate), N-(hydroxymethyl)-2-propenamide, methyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

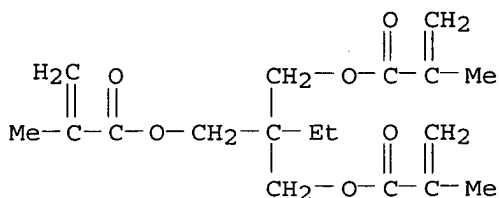
CMF C7 H13 N O4 S



CM 2

CRN 3290-92-4

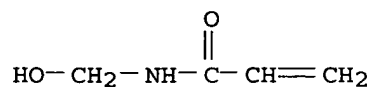
CMF C18 H26 O6



CM 3

CRN 924-42-5

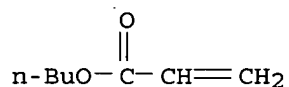
CMF C4 H7 N O2



CM 4

CRN 141-32-2

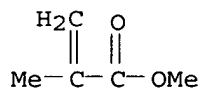
CMF C7 H12 O2



CM 5

CRN 80-62-6

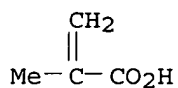
CMF C5 H8 O2



CM 6

CRN 79-41-4

CMF C4 H6 O2



RN 153344-70-8 CAPLUS

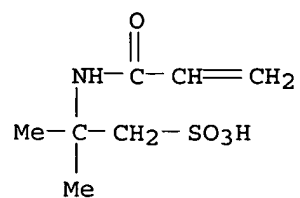
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl bis(2-methyl-2-propenoate), ethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, methyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

CMF C7 H13 N O4 S

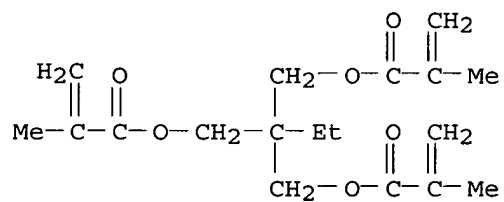
KOROMA EIC1700



CM 2

CRN 3290-92-4

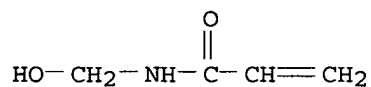
CMF C18 H26 O6



CM 3

CRN 924-42-5

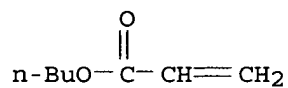
CMF C4 H7 N O2



CM 4

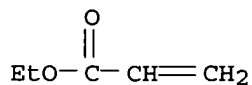
CRN 141-32-2

CMF C7 H12 O2



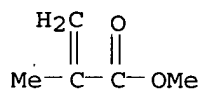
CM 5

CRN 140-88-5  
CMF C5 H8 O2



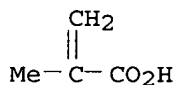
CM 6

CRN 80-62-6  
CMF C5 H8 O2



CM 7

CRN 79-41-4  
CMF C4 H6 O2



IC ICM C04B028-02  
ICI C04B028-02, C04B014-04, C04B024-26, C04B014-02  
CC 58-3 (Cement, Concrete, and Related Building Materials)  
ST mortar acrylic polymer artificial stone; fly ash artificial stone  
IT Mortar  
Pigments  
(artificial stone **compns.** contg., acrylic polymer in, for water and acid resistance)  
IT Acrylic polymers, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(artificial stone **compns.** contg., mortar-based, for water and acid resistance)  
IT Stone, artificial  
RL: TEM (Technical or engineered material use); USES (Uses)  
(mortar-based **compns.** for, acrylic polymer in, for water and acid resistance)  
IT Ashes (residues)  
(fly, artificial stone **compns.** contg., acrylic polymer in,

for water and acid resistance)  
 IT **Cement**  
 (portland, artificial stone **compns.** contg., acrylic polymer  
 in, for water and acid resistance)  
 IT **Cement**  
 (white, artificial stone **compns.** contg., acrylic polymer in,  
 for water and acid resistance)  
 IT 50657-41-5 153344-68-4 153344-69-5 153344-70-8  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (artificial stone **compns.** contg., mortar-based, for water and  
 acid resistance)

L37 ANSWER 20 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1993:433221 CAPLUS  
 DOCUMENT NUMBER: 119:33221  
 TITLE: **Cement** admixtures for improving workability  
 INVENTOR(S): Egawa, Junta; Yoshida, Makiko; Takahashi, Masatoshi  
 PATENT ASSIGNEE(S): Lion Corp, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05032441	A2	19930209	JP 1991-212947	19910729
JP 3172748	B2	20010604		

PRIORITY APPLN. INFO.: JP 1991-212947 19910729

AB The **cements** admixts. comprise (1) a copolymer having no.-av.  
 mol. wt. 750-300,000 from N-substituted-.alpha.,.beta.-unsatd.  
 monocarboxylic amide deriv. (I), CH<sub>2</sub>=CR<sub>1</sub>CONHR<sub>2</sub>SO<sub>3</sub>X (R<sub>1</sub> = H or lower alkyl,  
 R<sub>2</sub> = C<sub>1</sub>-4 alkylene, X = H, alkali metals, alk. earth metals, ammonium, or  
 org. ammonium), and unsatd. carboxylic acid or its salt (II) at I/II mol.  
 ratio of (5-95)/(5-95) and (b) a copolymer having no.-av. mol. wt.  
 10,000-300,000 from I and unsatd. carboxylic ester or vinyl acetate (III)  
 at I/III mol. ratio of (40-95)/(5-60).

IT 37350-42-8 53845-62-8 57502-17-7  
 62839-61-6 78197-98-5 79020-07-8  
 86468-54-4 87431-09-2 139412-84-3  
 148253-18-3

RL: USES (Uses)  
 (**cement** admixts. contg., for workability)

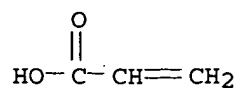
RN 37350-42-8 CAPLUS

CN 2-Propenoic acid, sodium salt, polymer with 2-methyl-2-[(1-oxo-2-  
 propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX  
 NAME)

CM 1

CRN 7446-81-3

CMF C3 H4 O2 . Na

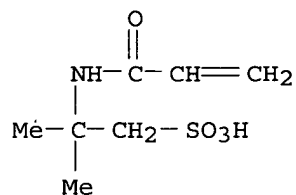


● Na

CM 2

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

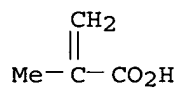
RN 53845-62-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, sodium salt, polymer with  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium  
salt (9CI) (CA INDEX NAME)

CM 1

CRN 5536-61-8

CMF C4 H6 O2 . Na

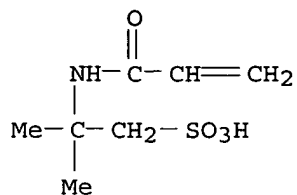


● Na

CM 2

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

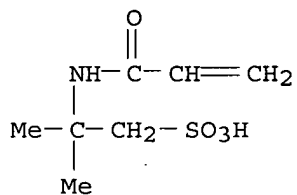
RN 57502-17-7 CAPLUS

CN 2-Butenedioic acid (2Z)-, disodium salt, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

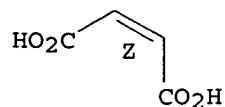
CM 2

CRN 371-47-1

CMF C4 H4 O4 . 2 Na

Double bond geometry as shown.

KOROMA EIC1700



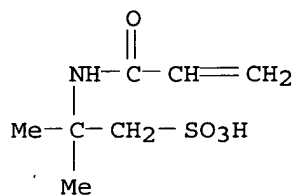
● 2 Na

RN 62839-61-6 CAPLUS  
 CN 2-Propenoic acid, methyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

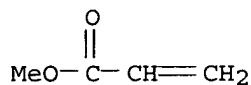


● Na

CM 2

CRN 96-33-3

CMF C4 H6 O2



RN 78197-98-5 CAPLUS  
 CN 2-Propenoic acid, ethyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

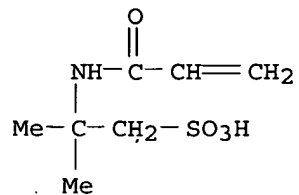
CM 1

KOROMA EIC1700



CRN 5165-97-9

CMF C7 H13 N O4 S . Na

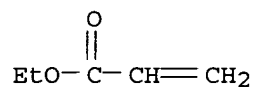


● Na

CM 2

CRN 140-88-5

CMF C5 H8 O2



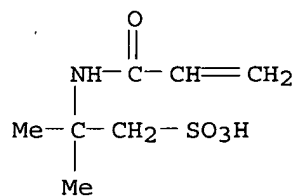
RN 79020-07-8 CAPLUS

CN Acetic acid ethenyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

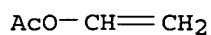


● Na

CM 2

CRN 108-05-4

CMF C4 H6 O2



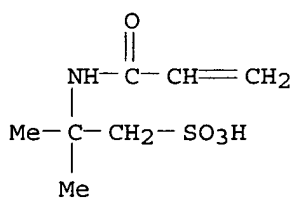
RN 86468-54-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium  
salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

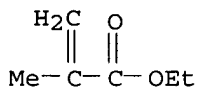


● Na

CM 2

CRN 97-63-2

CMF C6 H10 O2



RN 87431-09-2 CAPLUS

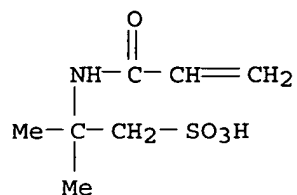
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium  
salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

KOROMA EIC1700

CMF C7 H13 N O4 S . Na

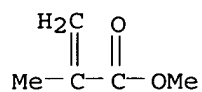


● Na

CM 2

CRN 80-62-6

CMF C5 H8 O2



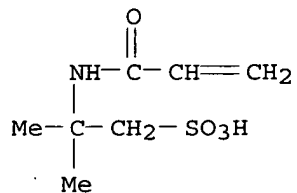
RN 139412-84-3 CAPLUS

CN 2-Butenedioic acid (2Z)-, dimethyl ester, polymer with  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium  
salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



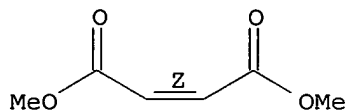
● Na

CM 2

KOROMA EIC1700

CRN 624-48-6  
CMF C6 H8 O4

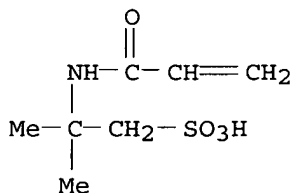
Double bond geometry as shown.



RN 148253-18-3 CAPLUS  
CN 2-Butenedioic acid (2Z)-, diethyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9  
CMF C7 H13 N O4 S . Na

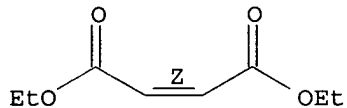


● Na

CM 2

CRN 141-05-9  
CMF C8 H12 O4

Double bond geometry as shown.



IC ICM C04B024-26  
CC 58-2 (Cement, Concrete, and Related Building Materials)  
Section cross-reference(s): 38

KOROMA EIC1700

ST **cement** admixt workability improvement  
 IT **Cement**  
 (admixts. contg. copolymers from unsatd. monocarboxylic amide derivs.  
 and unsatd. carboxylic acid and its ester for, for workability)  
 IT **Concrete**  
 (**cement** admixts. contg., for workability)  
 IT 37350-42-8 53845-62-8 57502-17-7  
 62839-61-6 78197-98-5 79020-07-8  
 86468-54-4 87431-09-2 139412-84-3  
 148253-18-3  
 RL: USES (Uses)  
 (**cement** admixts. contg., for workability)

L37 ANSWER 21 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1993:414176 CAPLUS  
 DOCUMENT NUMBER: 119:14176  
 TITLE: **Cement** admixtures for improving flowability  
 INVENTOR(S): Egawa, Junta; Yoshida, Makiko; Takahashi, Masatoshi  
 PATENT ASSIGNEE(S): Lion Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05017191	A2	19930126	JP 1991-185745	19910629
JP 3172747	B2	20010604		

PRIORITY APPLN. INFO.: JP 1991-185745 19910629

AB The title **cement** admixts. contain (a) copolymer (wt. av. mol.  
 wt.) from CH<sub>2</sub> = CR<sub>1</sub>CONHR<sub>2</sub>CO<sub>3</sub>X (A) (R<sub>1</sub> = H or lower alkyl, R<sub>2</sub> = C<sub>1</sub>-4  
 alkylene, X = H, alkali metal, alk. earth metal, NH<sub>4</sub><sup>+</sup>), unsatd. carboxylic  
 acid or its salt (B), and unsatd. carboxylic acid ester or vinyl acetate  
 (C) at A/B/C mol ratio = (10-85)/(10-85)/(3-35), and (b) copolymer (wt.  
 av. mol. wt. 10,000-300,000) from A and C at A/C mol ratio =  
 (40-95)/(15-60). Thus, a **concrete** mixt. contg. a **cement**  
 admixt. comprising Na 2-acrylamide-2-methylpropane sulfonate-Na  
 methacrylate-Me methacrylate copolymer and Na 2-acrylamide-2-methylpropane  
 sulfonate-Me methacrylate copolymer at 80/20 wt. ratio showed good  
 flowability (low slump loss).

IT 62839-61-6 79020-07-8 86468-54-4  
 87431-09-2 139412-84-3 142861-77-6  
 148253-15-0 148253-16-1 148253-17-2  
 148253-18-3  
 RL: USES (Uses)

(**cement** admixts. contg., for improving flowability)

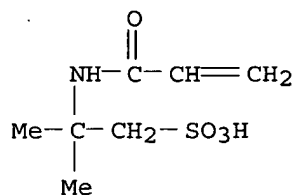
RN 62839-61-6 CAPLUS

CN 2-Propenoic acid, methyl ester, polymer with 2-methyl-2-[(1-oxo-2-  
 propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX  
 NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

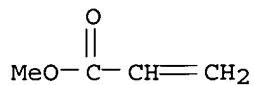


● Na

CM 2

CRN 96-33-3

CMF C4 H6 O2



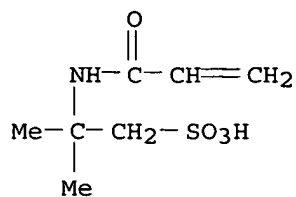
RN 79020-07-8 CAPLUS

CN Acetic acid ethenyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

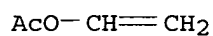


● Na

CM 2

CRN 108-05-4

CMF C4 H6 O2



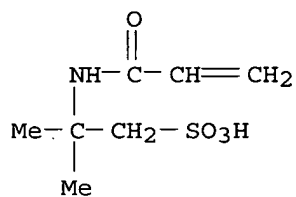
RN 86468-54-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium  
salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



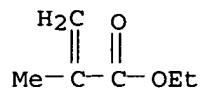
● Na

CM 2

CRN 97-63-2

CMF C6 H10 O2

KOROMA EIC1700



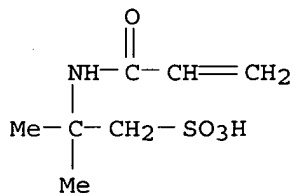
RN 87431-09-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium  
salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

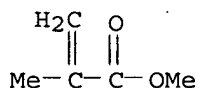


● Na

CM 2

CRN 80-62-6

CMF C5 H8 O2



RN 139412-84-3 CAPLUS

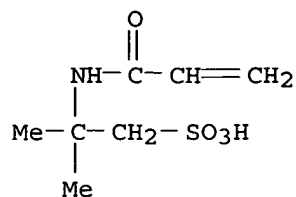
CN 2-Butenedioic acid (2Z)-, dimethyl ester, polymer with  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium  
salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na





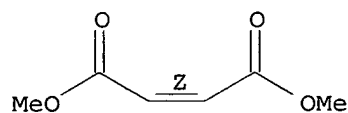
● Na

CM 2

CRN 624-48-6

CMF C6 H8 O4

Double bond geometry as shown.



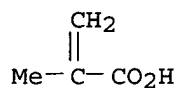
RN 142861-77-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium  
salt and sodium 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 5536-61-8

CMF C4 H6 O2 . Na



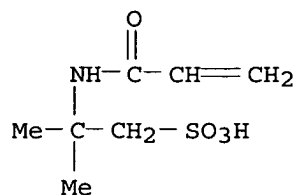
● Na

CM 2

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

KOROMA EIC1700

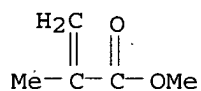


● Na

CM 3

CRN 80-62-6

CMF C5 H8 O2



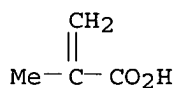
RN 148253-15-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, sodium salt, polymer with  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium  
salt and methyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 5536-61-8

CMF C4 H6 O2 . Na

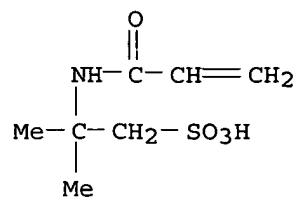


● Na

CM 2

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

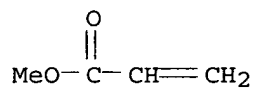


● Na

CM 3

CRN 96-33-3

CMF C4 H6 O2



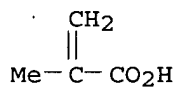
RN 148253-16-1 CAPLUS

CN 2-Butenedioic acid (2Z)-, dimethyl ester, polymer with  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium  
salt and sodium 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 5536-61-8

CMF C4 H6 O2 . Na

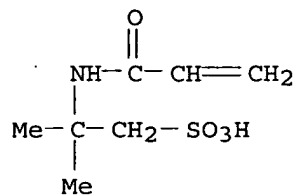


● Na

CM 2

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



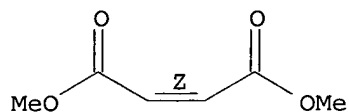
● Na

CM 3

CRN 624-48-6

CMF C6 H8 O4

Double bond geometry as shown.



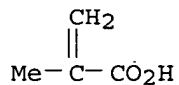
RN 148253-17-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, sodium salt, polymer with ethenyl acetate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 5536-61-8

CMF C4 H6 O2 . Na



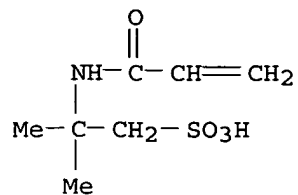
● Na

CM 2

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

KOROMA EIC1700

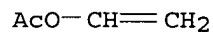


● Na

CM 3

CRN 108-05-4

CMF C4 H6 O2



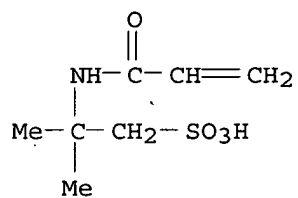
RN 148253-18-3 CAPLUS

CN 2-Butenedioic acid (2Z)-, diethyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

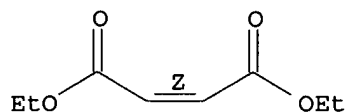
CM 2

CRN 141-05-9

CMF C8 H12 O4

KOROMA EIC1700

Double bond geometry as shown.



IC ICM C04B024-26  
 CC 58-2 (Cement, Concrete, and Related Building Materials)  
 ST polymeric **cement** admixt flowability improvement  
 IT **Cement**  
     **Concrete**  
     (admixts. for, contg. sodium 2-acrylamide-2-methylpropane  
     sulfonate-sodium methacrylate copolymer, for flowability)  
 IT 62839-61-6 79020-07-8 86468-54-4  
 87431-09-2 139412-84-3 142861-77-6  
 148253-15-0 148253-16-1 148253-17-2  
 148253-18-3  
 RL: USES (Uses)  
     (**cement** admixts. contg., for improving flowability)

L37 ANSWER 22 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1992:157610 CAPLUS  
 DOCUMENT NUMBER: 116:157610  
 TITLE: **Cement** dispersants for slump loss prevention  
 INVENTOR(S): Okada, Toshihiro; Tohori, Etsuo; Yoshida, Makiko  
 PATENT ASSIGNEE(S): Lion Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
           CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03228855	A2	19911009	JP 1990-24138	19900201
PRIORITY APPLN. INFO.:			JP 1990-24138	19900201
AB The <b>cement</b> dispersants contain (a) polystyrenesulfonic acid salts and (b) copolymers or their salts of N-(sulfonic group-contg. substituent)-.alpha.,.beta.-unsatd. monocarboxylic acid amide deriv. and monomers which are polymerizable with the amide derivs. Thus, a <b>concrete</b> with a dispersing agent contg. sulfonated polystyrene Na salt and 2-acrylamido-2-methylpropanesulfonic acid Na salt-Me methacrylate copolymer maintained desired plasticity for 60 min.				
IT 77019-71-7 81313-01-1 140144-03-2 140144-04-3 140144-06-5 140144-08-7 140144-09-8 RL: USES (Uses) ( <b>cement</b> dispersants contg. polystyrenesulfonates and, for				

slump loss prevention)

RN 77019-71-7 CAPLUS

CN 2-Propenoic acid, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 40623-75-4

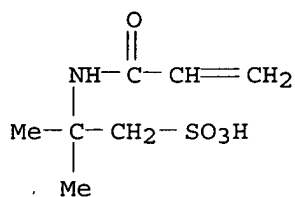
CMF (C7 H13 N O4 S . C3 H4 O2)x

CCI PMS

CM 2

CRN 15214-89-8

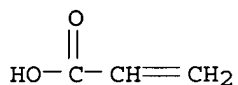
CMF C7 H13 N O4 S



CM 3

CRN 79-10-7

CMF C3 H4 O2



RN 81313-01-1 CAPLUS

CN Acetic acid ethenyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 64112-05-6

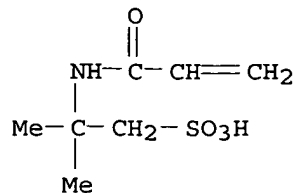
CMF (C7 H13 N O4 S . C4 H6 O2)x

CCI PMS

CM 2

CRN 15214-89-8

CMF C7 H13 N O4 S



CM 3

CRN 108-05-4

CMF C4 H6 O2



RN 140144-03-2 CAPLUS

CN 2-Butenedioic acid (2Z)-, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 115430-00-7

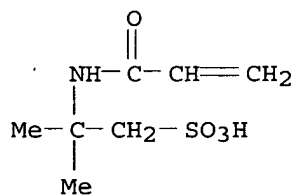
CMF (C7 H13 N O4 S . C4 H4 O4)x

CCI PMS

CM 2

CRN 15214-89-8

CMF C7 H13 N O4 S



CM 3

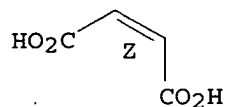
CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.

KOROMA EIC1700





RN 140144-04-3 CAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer with 2-methyl-2-propenamide, calcium salt (9CI) (CA INDEX NAME)

CM 1

CRN 116085-70-2

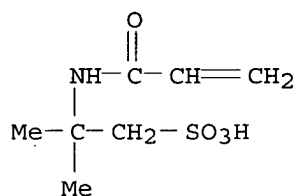
CMF (C7 H13 N O4 S . C4 H7 N O)x

CCI PMS

CM 2

CRN 15214-89-8

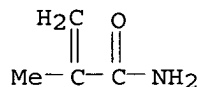
CMF C7 H13 N O4 S



CM 3

CRN 79-39-0

CMF C4 H7 N O



RN 140144-06-5 CAPLUS

CN 2-Propenoic acid, methyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid, calcium salt (9CI) (CA INDEX NAME)

CM 1

CRN 140144-05-4

CMF (C7 H13 N O4 S . C4 H6 O2)x

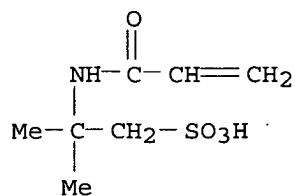
KOROMA EIC1700

CCI PMS

CM 2

CRN 15214-89-8

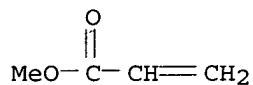
CMF C7 H13 N O4 S



CM 3

CRN 96-33-3

CMF C4 H6 O2



RN 140144-08-7 CAPLUS

CN 2-Butenedioic acid (2Z)-, dimethyl ester, polymer with  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid, calcium salt  
(9CI) (CA INDEX NAME)

CM 1

CRN 140144-07-6

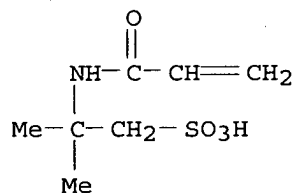
CMF (C7 H13 N O4 S . C6 H8 O4)x

CCI PMS

CM 2

CRN 15214-89-8

CMF C7 H13 N O4 S



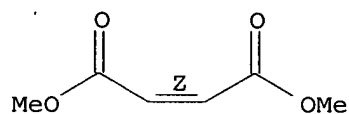
KOROMA EIC1700

CM 3

CRN 624-48-6

CMF C6 H8 O4

Double bond geometry as shown.



RN 140144-09-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with methyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 104626-08-6

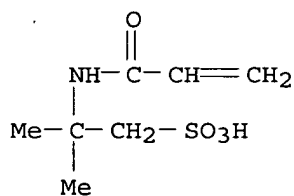
CMF (C7 H13 N O4 S . C5 H8 O2 . C4 H6 O2)x

CCI PMS

CM 2

CRN 15214-89-8

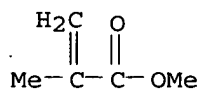
CMF C7 H13 N O4 S



CM 3

CRN 80-62-6

CMF C5 H8 O2

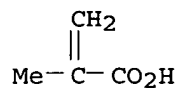


KOROMA EIC1700

CM 4

CRN 79-41-4

CMF C4 H6 O2



IT 87431-09-2

RL: USES (Uses)

(cement dispersants contg. polystyrenesulfonates and, for slump loss prevention, prepn. of)

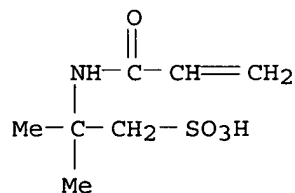
RN 87431-09-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

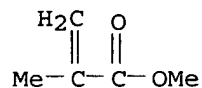


● Na

CM 2

CRN 80-62-6

CMF C5 H8 O2



IC ICM C04B024-26

KOROMA EIC1700

CC 58-1 (Cement, Concrete, and Related Building Materials)  
 ST dispersant **cement** polystyrenesulfonate salt; acrylamido  
 alkylsulfonate polymer **cement** dispersant  
 IT **Cement**  
 (dispersants for, contg. polystyrenesulfonates and acrylamido  
 alkylsulfonate copolymers, for slump loss prevention)  
 IT Dispersing agents  
 (for **cement**, contg. polystyrenesulfonates and acrylamido  
 alkylsulfonates copolymers, for slump loss prevention)  
 IT **Concrete**  
 (modifiers for, contg. polystyrenesulfonates and acrylamido  
 alkylsulfonate copolymers, for slump loss prevention)  
 IT 9003-53-6D, Polystyrene, sulfonated, sodium or calcium salts  
 RL: USES (Uses)  
 (**cement** dispersants contg. acrylamido alkylsulfonate  
 copolymers and, for slump loss prevention)  
 IT 77019-71-7 81313-01-1 140144-03-2  
 140144-04-3 140144-06-5 140144-08-7  
 140144-09-8  
 RL: USES (Uses)  
 (**cement** dispersants contg. polystyrenesulfonates and, for  
 slump loss prevention)  
 IT 87431-09-2  
 RL: USES (Uses)  
 (**cement** dispersants contg. polystyrenesulfonates and, for  
 slump loss prevention, prepn. of)

L37 ANSWER 23 OF 30 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1992:112290 CAPLUS  
 DOCUMENT NUMBER: 116:112290  
 TITLE: Polymeric admixtures for **cement**  
 INVENTOR(S): Yoshida, Makiko; Takahashi, Masatoshi; Tohori, Etsuo  
 PATENT ASSIGNEE(S): Lion Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03228856	A2	19911009	JP 1990-24137	19900201
JP 2869662	B2	19990310		

PRIORITY APPLN. INFO.: JP 1990-24137 19900201

AB The admixts. are 95/5-40/60 mol copolymers of CH<sub>2</sub>:CR<sub>1</sub>CONHR<sub>2</sub>SO<sub>3</sub>X [R<sub>1</sub> = H, lower alkyl; R<sub>2</sub> = C<sub>1</sub>-4 linear or branched alkyl; X = H, alkali metal, alk. earth metal, (org.) ammonium] with unsatd. carboxylic acid ester or vinyl acetate. The admixts. give **cement compns.** having high fluidity and low slump loss, without setting delaying. **Concrete** contg. Me methacrylate-Na 2-acrylamide-2-methylpropanesulfonate had lasting slump and air content without retarding.

IT 62839-61-6 78197-98-5 79020-07-8  
86468-54-4 87431-09-2 139412-84-3  
139412-85-4

RL: USES (Uses)

(admixture, for cement, for fluidization without setting  
delaying)

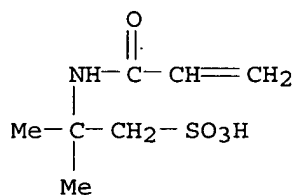
RN 62839-61-6 CAPLUS

CN 2-Propenoic acid, methyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

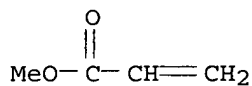


● Na

CM 2

CRN 96-33-3

CMF C4 H6 O2



RN 78197-98-5 CAPLUS

CN 2-Propenoic acid, ethyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

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